86th YEAR

AMERICAN GAS JOURNAL

NOVEMBER 1944

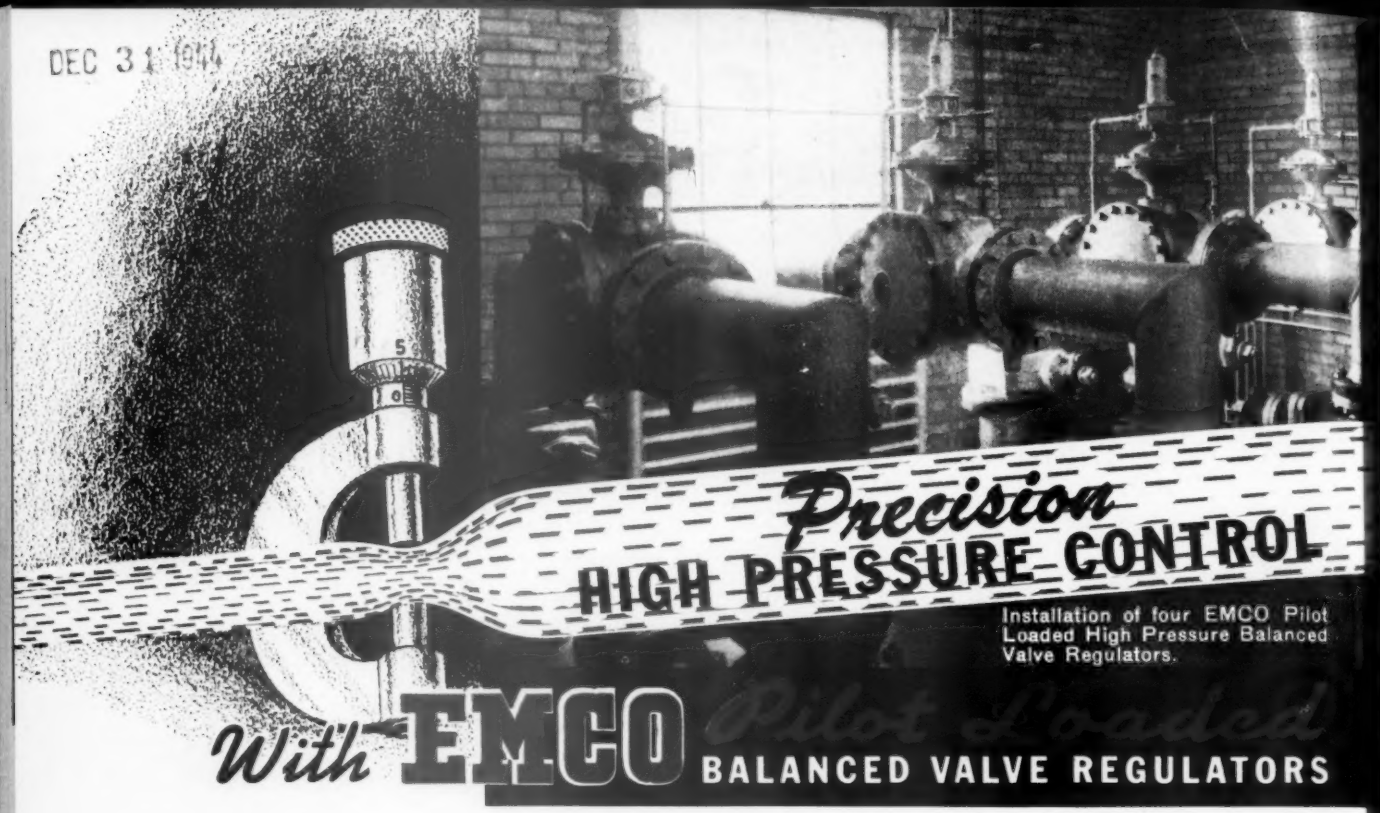
World's Greatest Salesman of Gas Heating, the Bryant pup continues reminding America of the convenience, cleanliness and economy of automatic gas heating through a series of national four-color advertisements. Back of the pup, Bryant research and development laboratories are working to provide the product improvements which are practical, proved and salable . . . which will make *more* and *more satisfied* gas users for you in the postwar years ahead. The Bryant Heater Company, Cleveland, Ohio . . . *One of the Dresser Industries.*

bryant

GAS HEATING

Let the pup be furnace man

DEC 31 1944



Precision HIGH PRESSURE CONTROL

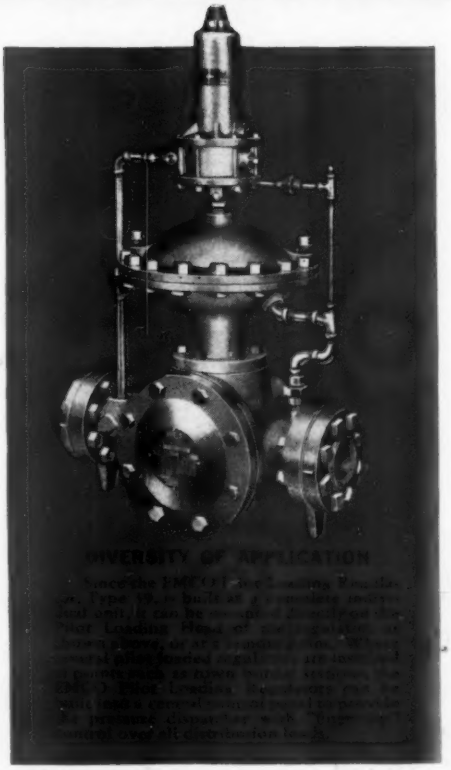
Installation of four EMCO Pilot Loaded High Pressure Balanced Valve Regulators.

With EMCO Pilot Loaded BALANCED VALVE REGULATORS

The EMCO Pilot Loading System of Pressure Regulation provides gas engineers with the ultimate in large volume, high pressure control accuracy. Pressure fluctuations, once tolerated as unavoidable in all regulators, are now a thing of the past. Pressure control to within one per cent has been made commercially feasible by the EMCO design, which is simple, rugged, self-contained and compact; is neat appearing, and economical to install and operate.

The range of control application is for outlet pressures of from 2 to 300 psi.

The EMCO Pilot Loading System may be applied to any EMCO High Pressure Balanced Valve Regulator originally built for lever and weight loading, as well as to new regulators. Ask for bulletin 1055.

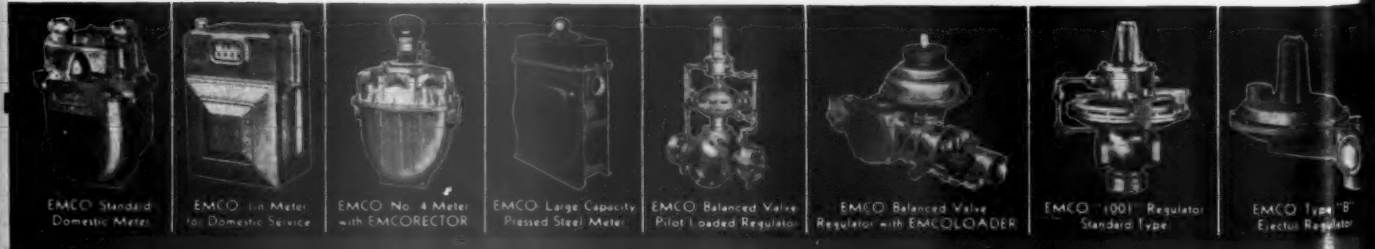


PITTSBURGH EQUITABLE METER CO.

Atlanta Houston **MERCO NORDSTROM VALVE CO.** Los Angeles Boston
Brooklyn Pittsburgh Main Offices, PITTSBURGH, PA. Seattle Buffalo
Chicago Kansas City Tulsa San Francisco New York

National Meter Division, Brooklyn, N. Y.

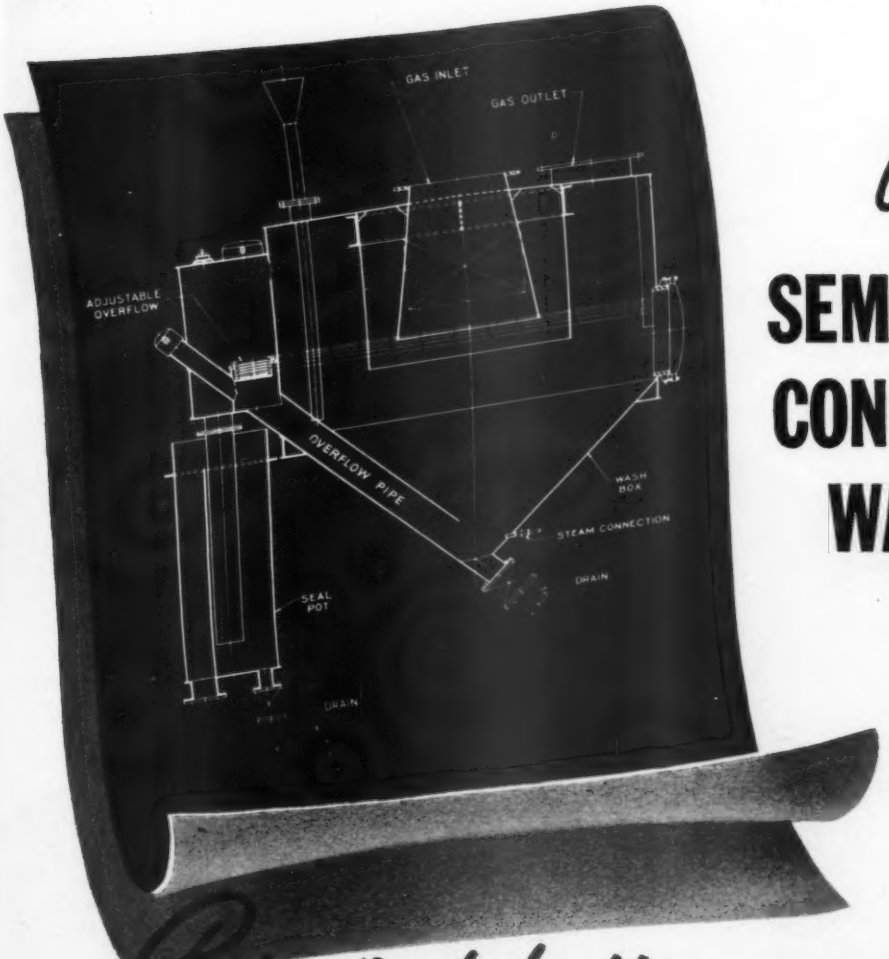
EMCO METERS AND REGULATORS



EMCO Standard Domestic Meter | EMCO Tin Meter for Domestic Service | EMCO No. 4 Meter with EMCORECTOR | EMCO Large Capacity Pressed Steel Meter | EMCO Balanced Valve Pilot Loaded Regulator | EMCO Balanced Valve Regulator with EMCOLOADER | EMCO "1001" Regulator Standard Type | EMCO Type "B" Ejector Regulator

For Accurate Gas Measurement and Control

WASH BOX CLEANING TROUBLES ENDED



By the

SEMET-SOLVAY CONE BOTTOM WASH BOX

Patented bottom overflow removes heavy oil tar Continuously

Having wash box troubles? If you use heavy oil as carbureting fuel, and have an old-fashioned side overflow wash box, you know what we mean—frequent shutdowns to remove a heavy tar deposit that has been cooked into a pitchy mass; production interrupted, sometimes just when you want it most; lower capacity and higher labor cost.

Why not eliminate all these troubles with a Semet-Solvay Cone Bottom Wash Box? Other operators using heavy oil with this improved wash box will testify that under normal operating conditions it is entirely self-cleaning.

Eliminate wash box shutdowns. Get rid of a messy, disagreeable job. Write us describing your present equipment and we will gladly send you full information concerning a change-over to the Semet-Solvay Cone Bottom Wash Box.

SEMET-SOLVAY ENGINEERING CORPORATION

40 Rector Street — **New York, N. Y.**

AMERICAN GAS JOURNAL, November, 1944. Vol. 161, No. 5. Published monthly by American Gas Journal, Inc., at 34 North Crystal St., East Stroudsburg, Pa. Executive and Editorial offices at 53 Park Place, New York, N. Y. Entered as second-class matter, October 7, 1928, at the post-office at East Stroudsburg, Pa., under the Act of March 3, 1879. Printed in U. S. A.

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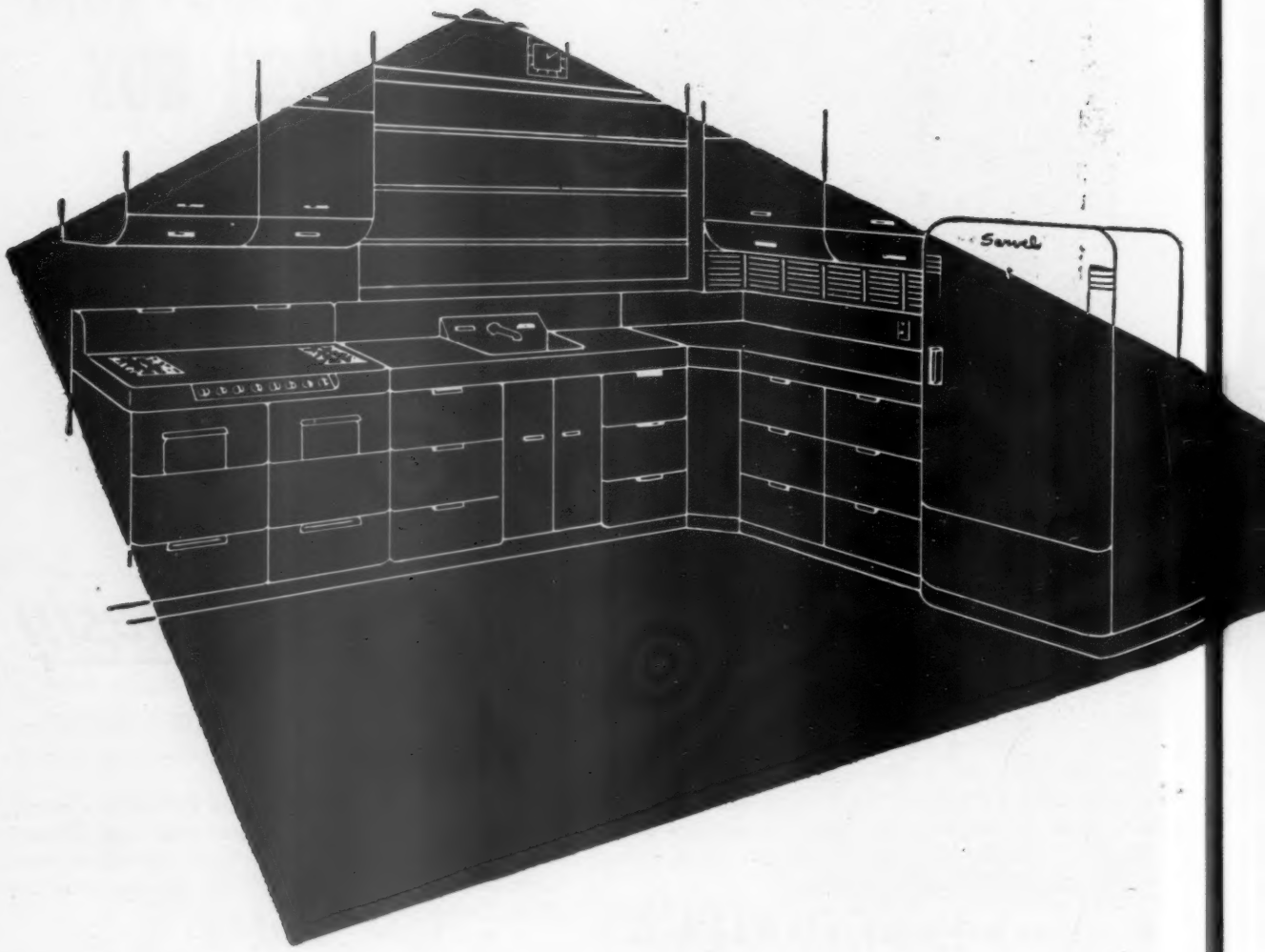


building your post-war gas load

What kind of kitchens will women want after the war? Experience indicates that the majority of women will be interested in step-saving kitchens that are cool, clean, and free from objectionable cooking odors—kitchens with matched range and refrigerator and specially designed, matched cabinets.

That's why the planned Gas Kitchen of integrated design offers the Gas Industry a powerful vehicle with which to step out ahead of post-war competition. For the All-Gas Kitchen will not only sell through beauty of design, but will also have the high standard of performance and utility that American housewives demand.

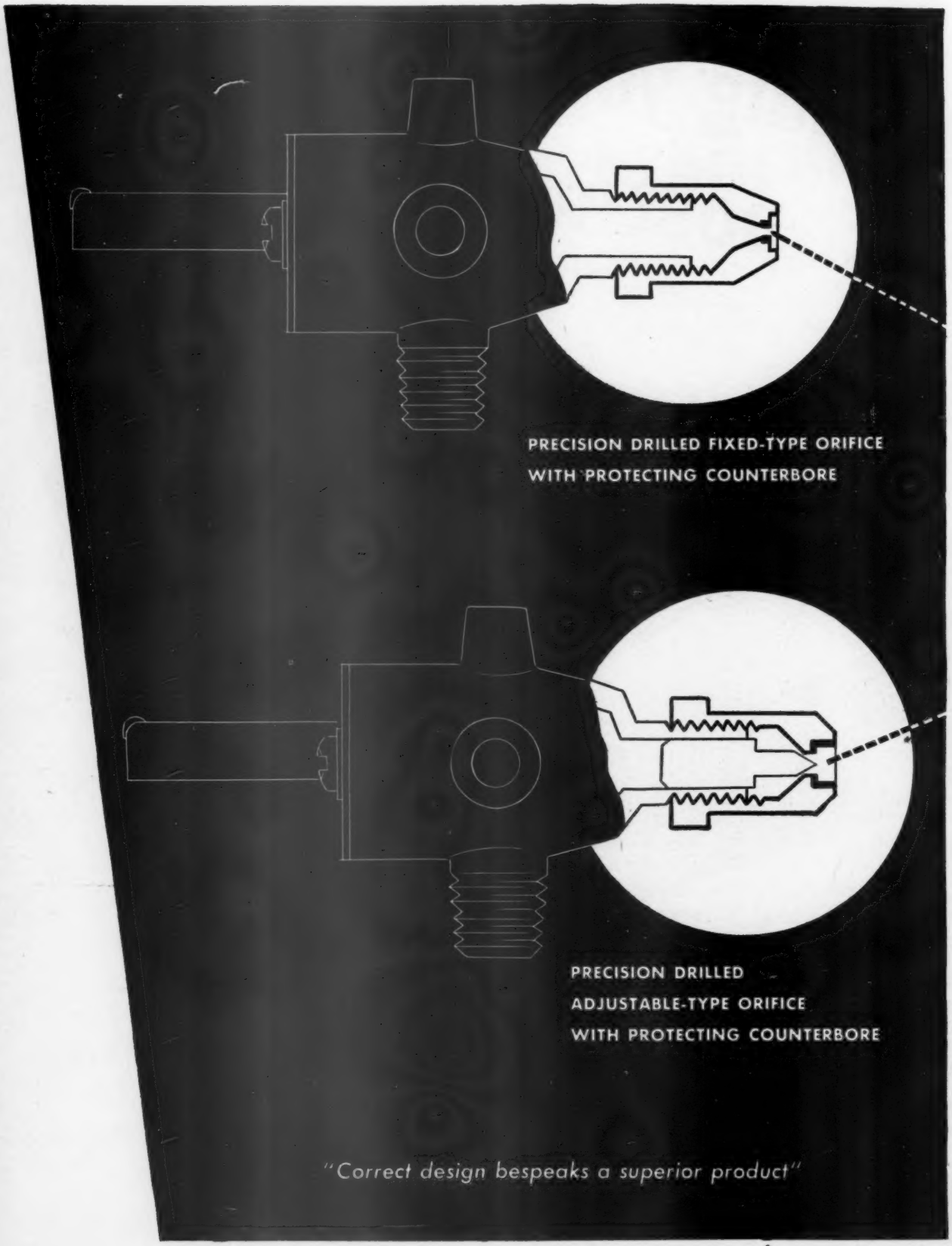
Many in our industry visualize the All-Gas Kitchen as a complete unit that can be easily tailored to any kitchen —old or new. Through the cooperative efforts of Gas Appliance manufacturers, this new idea in kitchen planning may soon be a reality.

Such a kitchen—if promoted aggressively and effectively—provides a sales opportunity to maintain and protect present gas loads. It also offers the means of adding considerable new load after the war.

Servel's contribution to this important program will be announced soon and will include a comprehensive training and merchandising *Plan of Action*.

Servel, Inc. Evansville 20, Indiana

What will the gas range of



the future be like . . . and WHY?

DISCUSSION NO. 9

Even Orifices on Gas Range Valves will be improved

All the gas that is used on a gas range flows from orifices on the valves or fittings. Orifices are as important as the appliance itself—because they control the proper amount and flow of the gas. If the orifices are not right, poor adjustment and poor operation result. Orifices on the Range of the Future will be the best that can be devised.

The prime requisite of an orifice is *accuracy of flow*. The superior orifice will be precision-drilled to exacting limits . . . will be carefully inspected and individually flow-tested . . . to insure correct capacity.

The other major essential of an orifice is *dependability of operation*. The superior orifice will be protected . . . protected by a counterbore at the orifice opening . . . so that it can never be damaged. Once it is drilled right, it stays right. On adjustable-type orifices the counterbore will also keep the adjusting pin below the surface . . . will keep it protected so that it is always properly aligned with the orifice opening.

These advantages of the "precision-engineered" orifice will eliminate the undesirable results brought about by servicemen reaming out or peening down orifices in a vain attempt to adjust gas burner flames to the same rating and appearance. They will likewise prevent the development of inaccurate flow and poor injection with flat-faced adjustable orifices as a result of damage to the orifice opening or the adjusting pin.

The advances in design of such important functional parts as the orifices controlling the gas flow will improve the performance and dependability of the Gas Range of the Future.

HARPER-WYMAN COMPANY

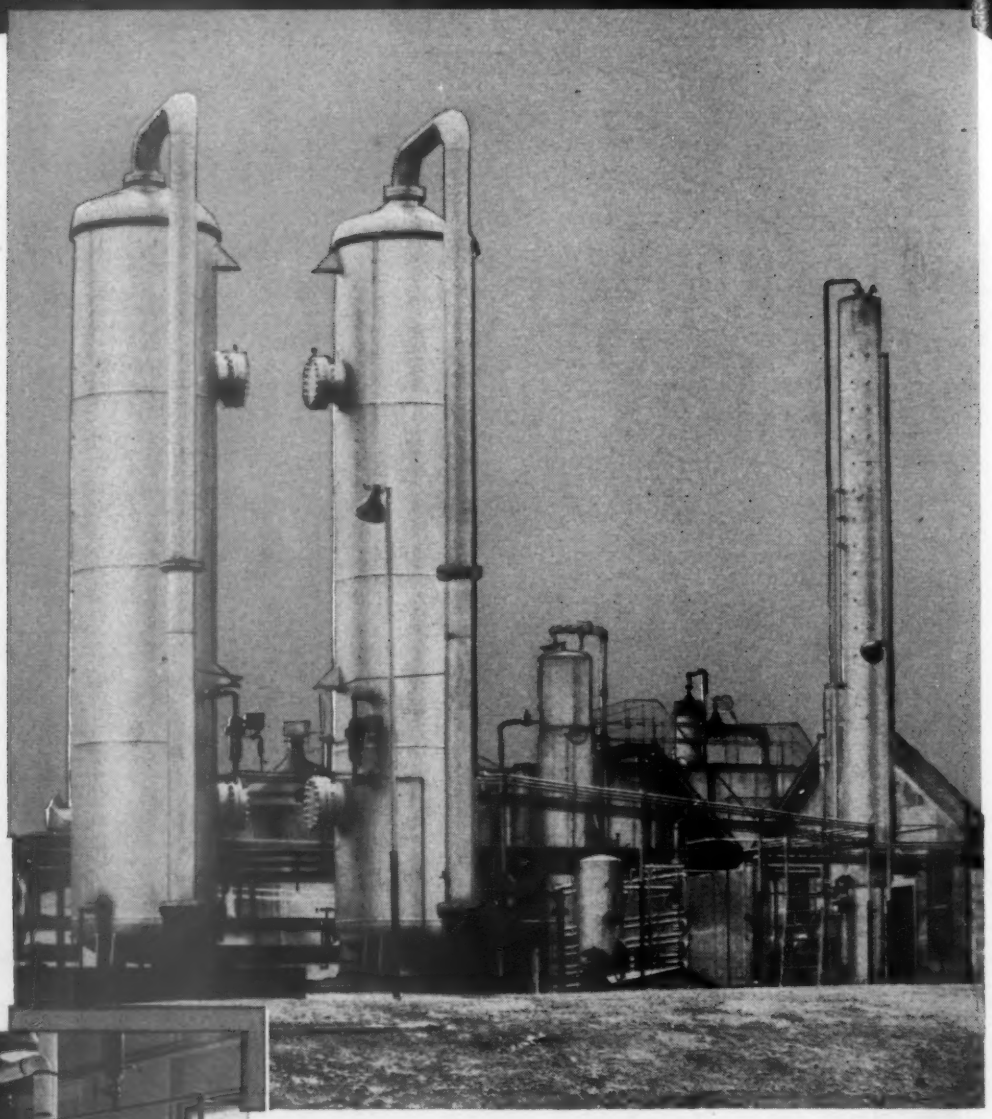
8562 VINCENNES AVENUE
CHICAGO 20, ILLINOIS

ARMY E NAVY

HARPER BURNER SYSTEM

2-burners-in-1

BLAW-KNOX GAS DEHYDRATION PLANTS



e twin absorption towers at
ht are handling 100,000,000 cu.
of gas per day at 290 lb. gauge.
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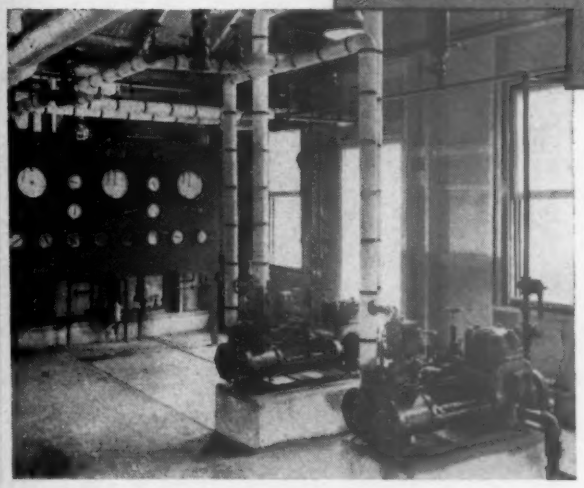
ved insure a *dry line.*



This Blaw-Knox Dehydration Plant, with its compact control and pumping station, has reduced transportation costs and eliminated hydrate freeze-ups—insured better service to the Gas Company's customers.

Lower Your Gas Processing Costs

The complete or partial dehydration of gases is closely related to gas transportation and gas processing costs. Blaw-Knox Gas Dehydration Plants are controlling the water vapor content of millions of cubic feet of gas per day at temperatures ranging from 40° F. to 110° F.

Years of experience with constant improvement in design to give more value per dollar invested—insures that you are getting the best with a Blaw-Knox Gas Dehydration Plant. We will be glad to furnish interesting performance data on these efficient plants.

BLAW-KNOX DIVISION OF BLAW-KNOX COMPANY

2070 FARMERS BANK BUILDING, PITTSBURGH, PA.

NEW YORK CHICAGO PHILADELPHIA BIRMINGHAM WASHINGTON

Representatives in Principal Cities

VOLUME 161
NUMBER 5

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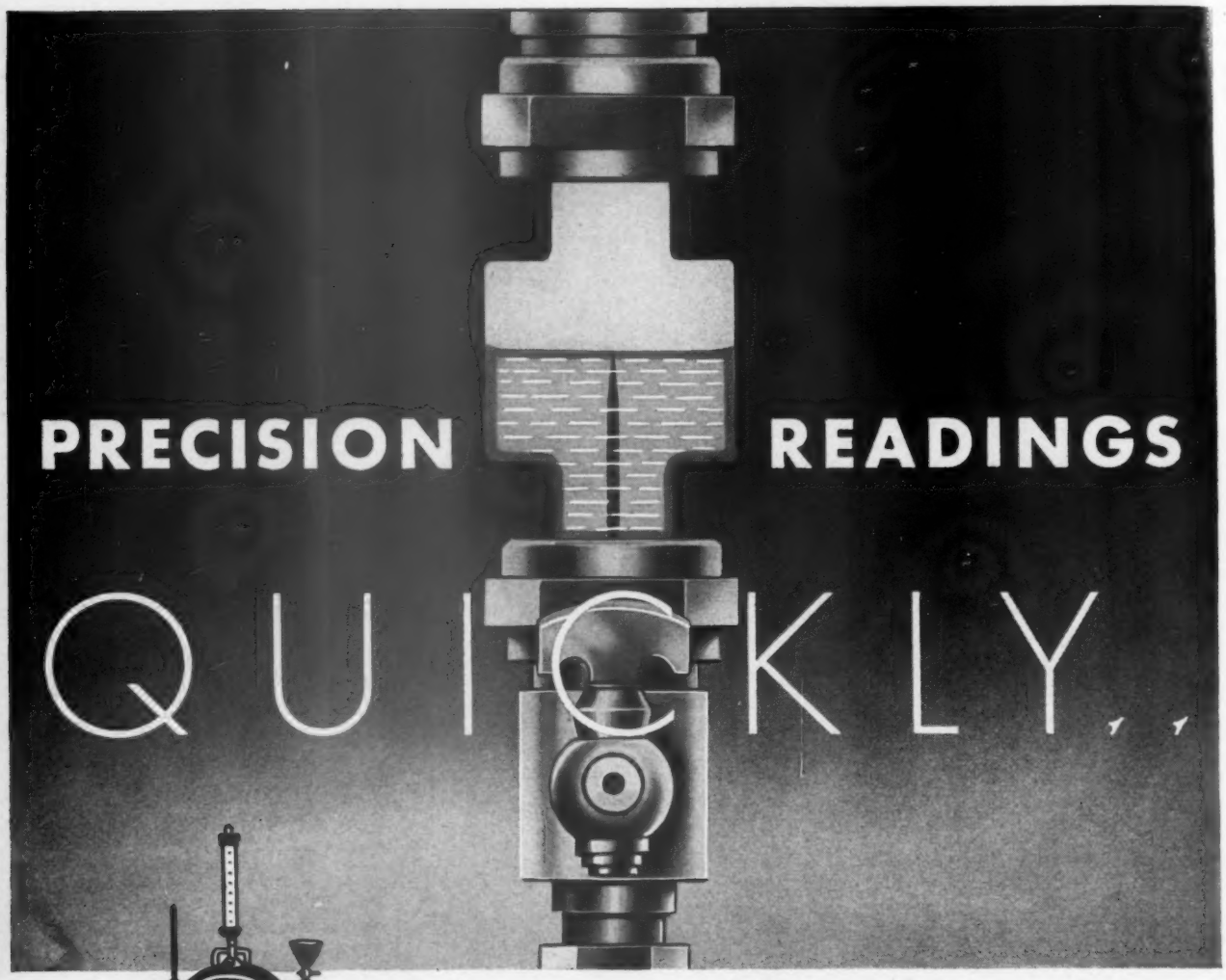

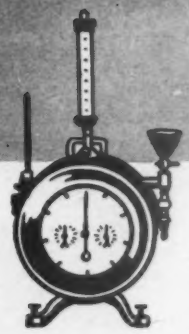

IN LABORATORY TESTING of gases every detail of AMERICAN wet test meters from gage glass to water line marker and chromium plated pointer insures not only more precise reading . . . quickly . . . but insures continued accuracy of operation for many years. • Greater facility of adjustment is provided. • The metals and materials employed throughout afford maximum protection against corrosion. • Bulletin AG3 describes the up-to-date features in detail, and gives complete data on capacities and applications of the various sizes. It will be mailed you on request. • These instruments are made by the originators and perfecters of wet test meters in the United States.

2205

AMERICAN METER COMPANY

INCORPORATED ESTABLISHED 1836

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NOVEMBER
1944

AMERICAN
GAS JOURNAL

VOLUME 161
NO. 5

Research and Development for the Gas Industry:— A Far-Reaching Program

THE EXECUTIVE BOARD of the American Gas Association has approved a plan designed to carry out the recommendations of the A.G.A. Postwar Planning Committee as to research, national advertising and general promotional effort. It is proposed that the gas industry provide funds for these programs of one million dollars per year for a three year period.

This fund is tentatively allocated as follows:

Utilization research, domestic, industrial and commercial appliances	$200,000
General technical research—production, transmission and distribution	$400,000

It is also proposed to increase the fund for national advertising from the present amount of $400,000 to $800,000, out of which is allocated from the fund $200,000 and the additional $200,000 to be contributed by the gas appliance manufacturers.

A promotional bureau will be established at A.G.A. headquarters to augment and coordinate the promotional work of A.G.A. with the gas utilties companies. The sum of $100,000 is allotted for this purpose, and the final $100,000 of the million dollar fund is allocated for the development and execution of industry-wide sales promotional programs in conjunction with the gas utilities, manufacturers of gas appliances and related appliances and equipment.

In order to raise this additional amount of $1,000,000 per year for the three year period, it is proposed that it be by voluntary subscription to the fund at the rate of .15 of 1% of the gross revenue of natural gas companies, .32 of 1% from manufactured gas companies and 1/30 of 1% from natural gas pipe line companies. If 70% of the total gas meters in the country participate in the program, based on revenues for 1941, a fund of $1,400,000 will be provided.

Everyone connected with the gas industry recognizes that this program is of vital importance. It is a splendid forward looking plan and every gas company should participate in it, for every one of them will receive benefits from it.

When we consider that the gas industry of England spends for research much more than this program proposes, is it going to be recorded that the gas industry of the United States has failed to meet this moderate amount to perform the most far reaching service ever given the gas industry? We think not. We believe the amount asked for will be considerably increased, and that every gas company will participate in it.

We have *the accepted fuel* for domestic uses. We must not only hold that load but increase it. We can do this if we plan properly and prosecute aggressively.

During 1941, the amount spent in national magazine advertising by the competing electric appliances was 3½ times the amount spent by the gas industry. In 1942 the ratio was 3 to 1 and in 1943 approximately 15 to 1. Of course, a large percentage of the amount spent in advertising electric appliances was done by a few very large manufacturing companies. We cannot meet that expenditure—and we do not have to, for as stated above, we have the accepted fuel and the proposed program will enable our gas appliance manufacturers to build appliances that *can and will* meet any competition and our sales promotional program will help every gas utility and dealer to *sell* them.

Up to date, there has been published by the A.G.A., 26 formal research bulletins. These bulletins only reach one man in a gas company or in an appliance manufacturing plant. Unless they were passed along to others, they have not fully accomplished their real purpose.

Public relations is also an important part of this program. If all the gas utilities have favorable local public relations it will create good national relations and the enlarged advertising program will be that much more effective. So. this job belongs to all of us and not to a few. This program is a fine tribute to the gas industry and the work of the Association. Make its support unanimous.

Far-reaching Promotional Program Launched at the 26th Annual Meeting of the American Gas Association

THE 26th Annual Meeting of the American Gas Association was held in New York, October 5th. The two day meeting to have been held in Chicago Oct. 5-6, was cancelled in compliance with the wishes of the Office of Defence Transportation.

Ernest R. Acker, President American Gas Association, and President Central Hudson Gas & Electric Co., Poughkeepsie,, N. Y., opened the meeting, and in his address reviewed the various activities of the Association during the past year. Mr. Acker stated that "The organization problems created by the reorganization of the Association on a two-department basis have been worked out in a highly cooperative manner, and the industry can rest assured that the intent of the reorganization has been effectively carried out."

"Although many committee activities" he said "have been suspended or curtailed due to war conditions and travel difficulties, the voluntary work of the General and Sectional Committees, which is so important to the effective operation of the Association, has proceeded on a highly satisfactory basis. I take great pleasure in expressing my appreciation of the contributions made by the many individuals acting on these committees who have given their time and thought for the benefit of the industry as a whole over and above the requirements of their own jobs. I wish to pay special tribute to the officers of our sections who have during the past year discharged their duties with great ability and with fine loyalty to the Association."

Referring to postwar plans he said:

"Our Postwar Planning Committee under the able leadership of Mr. A. M. Beebee, has continued during the year its vital and constructive efforts in behalf of the entire industry. Its conclusions have been repeatedly approved by our Executive Board and it appears that upon completion of its detailed studies the future duties of the Committee will be in the direction of influencing our member companies to support and

Ernest R. Acker

put into effect the recommendations of the Committee both on a national and local basis. The excellent work of this Committee, together with that of Mr. Boothby's Domestic Gas Research Committee and Mr. Noppel's Coordinating Committee on Research is primarily responsible for the development of the Plan for Research and Promotional Development in the Gas Industry."

Commenting on the approach for the resumption of appliance manufacturing he stated: "It is possible that within a few months after the surrender of Germany sufficient materials and labor will be available to justify extensive output of domestic gas appliances and enlarged production of commercial and industrial appliances. Our manufacturers are not announcing their plans from the roof tops, and in their highly competitive situation they cannot be criticized for such restraint, but I am confident that they will resume production with the utmost dispatch and that we shall within a reasonable period have appliances showing marked improvement in efficiency and appearance available to our companies and to other dealers.

"Despite the cessation under war conditions of the usual activities and income from testing, inspection and certification of appliances, the American Gas Association Laboratories at Cleveland and Los Angeles have, mainly through the energy and vision of the Director, Mr. R. M. Conner, and his staff been enabled to continue their operations and keep together a nucleus of key men through the production, inspection and engineering of essential war products. The largest item in this category involved supplying the Army Air Forces at Wright Field in Dayton, with large quantities of automatic continuous-flow oxygen regulators. These regulators are in wide use particularly in high altitudes and are extensively flown over the important air transport route over the Himalaya Mountains. In addition the Laboratories have produced hospital regulators which have undoubtedly saved lives in the transportation of wounded men from foreign battlefields to base hospitals and to this country."

Mr. Acker expressed his keen appreciation of the wholehearted support he had received from his fellow officers, the executive board, Major Forward and the headquarter's staff.

"My experience of the past year," he said, "has instilled in me a firm faith in the future of the gas industry. I am particularly impressed with the large number of capable young men who are giving so freely of their time and abilities to create for the industry and for themselves improved opportunity and more aggressive leadership. The import of these developments cannot be denied and the industry now has before it the desire, the opportunity and the determination for the greatest advancement in its history."

The retiring Treasurer, J. L. Llewellyn, The Brooklyn Union Gas Co., Brooklyn, N. Y., presented his report, and then came the report of the nominating committee, presented by Edward G. Boyer, Manager Gas Department, Philadelphia Electric Co. and the election of officers for the coming year. The complete list of newly elected officers of the Association, Directors and Sectional Chairmen will be found in this issue.

NEWLY ELECTED OFFICERS AMERICAN GAS ASSOCIATION, 1944-45

President—J. French Robinson president, The East Ohio Gas Company, Cleveland, Ohio.

First Vice-President—E. J. Boothby, vice-president and general manager, Washington Gas Light Co., Washington, D. C.

Second Vice-President—R. H. Hargrove, vice-president, United Gas Pipe Line Co., Shreveport, La.

Treasurer—Edward F. Barrett, president, Long Island Lighting Company, Mineola, N. Y.

Directors—Two Year Terms

R. G. Barnett, vice-president and general manager, Portland Gas and Coke Co., Portland, Oregon.

John W. Batten, president, Michigan Consolidated Gas Company, Detroit, Mich.

Arthur F. Bridge, vice-president, Southern Counties Gas Company, Los Angeles, California.

James A. Brown, vice-president, The Commonwealth & Southern Corp., New York, N. Y.

D. W. Harris, vice-president and general manager, Arkansas Natural Gas Corp., Shreveport, La.

Lyle C. Harvey, president, Bryant Heater Co., Cleveland, Ohio.

Norton McKean, president, American Meter Company, Albany, N. Y.

Hudson W. Reed, president, The Philadelphia Gas Works Company, Philadelphia, Pa.

Herman Russell, president, Rochester Gas and Electric Corporation, Rochester, N. Y.

T. J. Strickler, vice-president and general manager, Kansas City Gas Co., Kansas City, Mo.

P. S. Young, chairman, Executive Committee, Public Service Electric and Gas Co., Newark, N. J.

Section Officers

Accounting Section—Chairman—C. E. Packman, Middle West Service Company, Chicago, Ill.; Vice-Chairman—E. F. Embree, New Haven Gas Light Co., New Haven, Conn.

Residential Gas Section—Chairman—J. H. Warden, Oklahoma Natural Gas Corporation, Tulsa, Okla.; Vice-Chairman—J. J. Quinn, Boston Consolidated Gas Company, Boston, Mass.

Industrial & Commercial Gas Section—Chairman—Harry K. Wrench, president, Minneapolis Gas Light Co., Minneapolis, Minn.; Vice-Chairman—Harry A. Sutton, Asst. Gen. Ind. Fuel Rep., Public Service Electric & Gas Co., Newark, N. J.

Manufacturers' Section—Chairman—Frank J. Hoenigmann, Executive vice-president, Cribben and Sexton Company, Chicago, Ill.

Technical Section—Chairman—L. E. Knowlton, Providence Gas Co., Providence, R. I.; ViceChairman—Lester J. Eck, Minneapolis Gas Light Co., Minneapolis, Minn.

J. French Robinson
President American Gas Assn.
President East Ohio Gas Co.

E. J. Boothby
First Vice President A.G.A.
Vice Pres. and Gen. Mgr.
Washington Gas Light Co.

R. H. Hargrove
Second Vice President A.G.A.
Vice Pres. United Gas Pipe Line Co.

Edward F. Barrett
Treasurer A.G.A.
President Long Island Lighting Co.
Mineola, N. Y.

In accepting the office of President Mr. Robinson stated:

"The gas industry never faced a more critical period than the one we are in. I think it is safe to say that our industry never faced as critical a situation as it does now. We are in a war and must do the best we possibly can toward its prosecution. We have done so up until now, and that we will continue to do so goes without saying.

"We do not boast about it, because we are merely doing our duty as are all American industries, but our contribution to the war effort bears directly on another and equally pressing problem of the American Gas Industry, namely getting out of the war and getting our hats back.

"In other words, wartime imposed upon us the necessity of an all-out conversion to war. We did that willingly. It is inevitable that there be an end of the war. It is equally important that the wartime economy of the Nation also come to a stop at that point.

"Equally with our responsibility in prosecuting the war, it is our business from now on to see that we are discharged back into civil life as America knows life, and that we retain none of the regimentation to which we consented solely as a military measure. I think there must be agreement, decision, and action on our part to that end. It is part of our business that we do so. We all agree to rational regulation as it has always been understood. We do object, however, to even a semi-militaristic status in peacetime.

"Nothing could be more certain than that we are all in agreement along these lines, and with this understanding we can assure ourselves that we will all work together with a common interest—a common American interest, of course.

"I say with sincerity that I appreciate the compliment that has been paid me, and fully recognize my responsibility."

Edward Falck, Director, Office of War Utilities, Washington, D. C., presented a "Message from the War Production Board."

In line with the general policy of the War Produtcion Board, Falck revealed that the Office of War Utilities plans to take the following specific actions with respect to the gas industry:

(1) Utilities Order U-1 will be revoked. Gas Utilities will be permitted, without restriction of any kind, to engage in rehabilitation of their systems and construction of new plant and facilities. There will no longer be any necessity for gas companies to file applications on Form WPB-2774 before going ahead with new construction. The Housing Utilities Standards will be abolished.

(2) Limitation Order L-174 and Utilities Order U-7 will be repealed. There will be no further restrictions on service to new space heating installations, new industrial consumers, or on service to new areas. Deliveries of gas from one utility to another will be uncontrolled. However, natural gas companies will be urged to continue to sell and exchange gas with each other in such a manner as to make the maximum amount of service available in any area where a shortage may exist or impend.

(3) The Office of War Utilities will use its priorities powers during the subsequent period solely for the purpose of protecting military requirements, supporting war industry, and clearly essential civilian activities. The Office of War Utilities' staff will be greatly reduced but a nucleus organization will be maintained for trouble shooting. Should any real difficulties confront the gas industry which would threaten war production or highly essential civilian activities, the Office of War Utilities' staff will be available with all necessary authority to take remedial action. In short, no restrictions will be continued that would hamper normal construction and operation, but an emergency squad will be retained.

Pointing out that the gas industry had worked with brilliant success in cooperation with the government in the interest of the war effort, Mr. Falck asserted: "I am sure that we

Photo A. Gordon King

Left to right: (seated) Hall M. Henry, Chairman, Committee on Engineering and Economic Phases of the Gas Industry, Cambridge, Mass.; J. W. West, Jr., Secretary, Residential Gas Section, A.G.A. (Asst. Man. Dir.); C. F. Turner, Chairman Technical Section, Cleveland, Ohio; H. B. Andersen, Chairman, Subcommittee on Economics of Distribution Design for Domestic Load Building, Philadelphia, Pa.

(Standing) T. H. Kendall, Vice Chairman, Distribution Committee, Pittsburgh, Pa.; A. C. Cherry, Chairman, Distribution Committee, Cincinnati, Ohio; J. V. Postles, Chairman, Committee on Post War Planning Cooperation; L. J. Eck, Minneapolis, Minnesota.

SECTION OFFICERS AMERICAN GAS ASSOCIATION 1944-45

L. E. Knowlton C. E. Packman J. H. Warden F. J. Hoenigmann Harry K. Wrench

can preserve the diversity of individual enterprise within a framework of national unity and I hope that that objective will characterize the leadership in this industry."

Ernest R. Acker then presented the "Industry Program in Research, Advertising and Promotion," which calls for contributions which would add one million dollars annually for a three year period to the $400,000 now being spent for advertising. (An analysis of the program will be found on the first editorial page of this issue.)

The following gas industry leaders spoke briefly on the program.

A. F. Bridge, Los Angeles, California—"The program is the result of a considerable amount of study and planning by the Committee. It is well conceived, comprehensive and worthy of our enthusiastic support. The plan as it now stands is in no little extent the result of long and arduous efforts by Mr. Acker. I bespeak your hard work in obtaining the necessary financial support for this plan."

Frank H. Lerch Jr., New York—"You all know where I stand on research through my interest in the Gas Institute of Technology. This plan has my personal endorsement and I most heartily recommend it to every one here and hope you will go all out for it. I think you will find that it will accomplish the things that the industry needs that will cause its salvation. There should be no arguments against raising the money on a fixed term—that is a fixed obligation to raise it over a given period of time."

Major T. J. Strickler, Kansas City, Mo.—"I want to remind you that the forerunner of this plan, probably, is our national advertising program. In 1935, after seven years of effort, we finally got together on that and it was a step forward. We have spent something like $400,000 annually during that time, or about $3,600,000. In order to meet our future situation we should have at least $800,000 available. We feel the money spent so far has returned to the industry one hundred per cent on every dollar invested. I want to assure you gentlemen that in contemplating the national advertising phase of the program, the National Advertising Committee is prepared to see that every cent contributed for that purpose is going to be as well spent in the future as it has been in the past."

Left to right: C. H. Waring, Kansas City, Kansas; E. J. Tucker, Toronto, Ontario, Canada; R. G. Griswold, Electric Advisers, Inc., New York, (Rept. American Standards Association); H. W. Gee.
Photo A. Gordon King

Dean H. Mitchell, Hammond, Indiana—"Mr. Acker has referred to Moody's reports which are not kind to our manufactured gas industry. I have read that report carefully and the reason that Moody's and other investors' services have a feeling that we possibly will come into the postwar period on a wing and a prayer, is the feeling that we cannot adequately merchandise our appliances. It is their fear that we will not have the outlets through which to sell our product. Under these conditions, it seems to me obvious that this promotional bureau to be established at Association headquarters is essential. The promotional bureau can do many things.

"I feel very happy about the American gas industry at this time taking on a promotional program such as has been outlined, I sincerely hope that all of us will find a way to support it financially and otherwise."

John B. Klumpp, Philadelphia, Pa.—"I hope every one will stand behind this proposition of advertising, research and promotion and do everything they can, not only to present the industry favorably before our customers, but the general public, the bankers and every one who has money to invest."

R. L. Pattinson, Chatham, Ontario—"I represent a small company and the only criticism I have of this program is that I don't see how they are going to accomplish what they should with the small amount of money they are asking for. There is no doubt but what this should be done and it should have been done long ago."

Left to right: J. French Robinson, newly elected President, A.G.A., Cleveland, Ohio; T. J. Strickler, Kansas City, Mo.; D. P. Hartson, Pittsburgh, Pa.; Alexander Forward, Managing Director, A.G.A., New York.
Photo A. Gordon King

Managing Committees

The following Managing Committees of the Manufactured Gas Department and the Natural Gas Department were elected.

For the Manufactured Gas Department:

E. J. Boothby, CHAIRMAN, Vice President, Washington Gas Light Company, Washington, D. C.

R. G. Barnett, Vice President & Gen. Mgr., Portland Gas & Coke Company, Portland, Oregon

Edward F. Barrett, President, Long Island Lighting Company, Mineola, Long Island, N. Y.

Walter S. Byrne, Gen. Mgr., Metropolitan Utilities District, Omaha, Nebraska

Left to right: H. D. Lehman, Chairman, Gas Conditioning Committee, Philadelphia, Pa.; Dr. E. W. Guernsey, Chairman, Organic Sulphur Subcommittee, Baltimore, Md.; R. E. Kruger, Rochester, New York. *Photo A. Gordon King*

E. H. Eacker, Boston Consolidated Gas Company, Boston, Mass.

W. Bond Collins, Vice President, Peoples Water & Gas Company, Miami Beach, Florida

H. R. Cook, Jr., Vice President, Consolidated Gas Electric Light & Power Company of Baltimore, Maryland

A. M. Beeber, Genl. Supt. Gas Dept. Rochester Gas & Electric Corp., Rochester, New York.

Alfred Hirsh, Vice President, The Laclede Gas Light Company, St. Louis, Missouri

Thomas L. Kemp, Gen. Mgr., Citizens Gas & Coke Utility, Indianapolis, Indiana

L. E. Knowlton, Providence Gas Company, Providence, Rhode Island

Harry L. Nickerson, Chief Engineer, The Brooklyn Union Gas Company, Brooklyn, N. Y.

Bruno Rahn, President, Milwaukee Gas Light Company, Milwaukee, Wisconsin

Hudson W. Reed, President, The Philadelphia Gas Works Company, Philadelphia, Pa.

E. J. Tucker, Director & Gen. Mgr., Consumers Gas Co. of Toronto, Ontario

P. S. Young, Chairman of the Executive Committee, Public Service Electric and Gas Company, Newark, N. J.

For the Natural Gas Department:

R. H. Hargrove, CHAIRMAN, United Gas Pipe Line Co., P. O. Box 1407, Shreveport 92, La.

B. C. Adams, The Gas Service Co., 700 Scarritt Bldg., Kansas City 6, Mo.

C. E. Bennett, The Manufacturers Light & Heat Co., 800 Union Trust Bldg., Pittsburgh 30, Pa.

Joseph Bowes, Oklahoma Natural Gas Co., P. O. Box 871, Tulsa 2, Okla.

A. F. Bridge, Southern Counties Gas Co., 810 S. Flower St., Los Angeles 14, Calif.

F. C. Brown, Natural Gas Pipeline Co. of America, 20 N. Wacker Dr., Chicago 6, Ill.

E. Buddrus, Panhandle Eastern Pipe Line Co., 135 S. LaSalle St., Chicago 3, Ill.

D. W. Harris, Arkansas Natural Gas Co., P. O. Box 1734, Shreveport, La.

D. P. Hartson, Equitable Gas Co., 435 Sixth Ave., Pittsburgh 19, Pa.

D. A. Hulcy, Lone Star Gas Co., 1915 Wood St., Dallas 1, Texas

F. H. Lerch, Jr., Consolidated Natural Gas Co., 30 Rockefeller Plaza, New York 20, N. Y.

E. P. Noppel, Ebasco Services Inc., Two Rector St., New York 6, N. Y.

F. T. Parks, Public Service Co. of Colo., 900 Fifteenth St., Denver, Colo.

C. P. Rather, Southern Natural Gas Co., P. O. Box 2563, Birmingham 2, Ala.

E. L. Rawlins, Union Producing Co., P. O. Box 1407, Shreveport 92, La.

Paul Taylor, Stone & Webster Service Corp., 90 Broad Street, New York 4, N. Y.

C. H. Zachry, Southern Union Gas Co., Burt Bldg., Dallas 1, Texas

The Technical Section Meeting

The Technical Section of the American Gas Association, A. Gordon King, Secretary held a dinner meeting at the Hotel Biltmore, New York, on the evening of October 4th.

C. F. Turner, retiring Chairman, presided at the business meeting. The election of the sections officers for 1944-1945 was the first order of business. L. E. Knowlton, Providence Gas Co., Providence, R. I. was elected chairman, and L. J. Eck, Minneapolis Gas Light Co., Minneapolis, Minn., was elected vice chairman.

Following the election, Mr. Turner presented Mr. Knowlton with an engraved gavel, as a symbol of the office, and expressed the hope that Mr. Knowlton would have as much pleasure in its use as he himself had had during the past year. In turn, Mr. Knowlton complimented Mr. Turner not only on his record of achievement for the past year, but on his long record of work performed for the Section over the years, and presented him with an engraved Parker "51" pen and pencil set, on behalf of his associates on the Section Committees.

Verbal reports were made on the activities of the following Committees.

Beal Medal Award Committee. In the absence of R. L. Gaidry, Chairman, Secretary King announced that it had been decided to recommend no award for the present year—that at the present time there is a suggestion before Mr. Acker, as the representative of the Beal family, that the terms of the award be reconsidered in the light of the reorganization of the Association.

Left to right: E. J. Boothby, Vice Chairman, Manufactured Gas Department, Washington, D. C.; L. E. Knowlton, Chairman, Technical Section, Providence, R. I.; T. J. Strickler, Kansas City, Mo.; R. M. Conner, Director, A.G.A. Testing Laboratories, Cleveland, Ohio. *Photo A. Gordon King*

Other verbal reports were made by V. J. Altieri, Chairman of the Chemical Committee, A. C. Cherry, Chairman of the Distribution Committee, H. D. Lehman, Chairman, Gas Conditioning Committee, F. J. Pfluke, Chairman, Gas Production Committee, E. W. Jahn, Chairman of the Committee on the Operation of Public Utility Motor Vehicles, H. O. Lobell, Chairman, Mixed Gas Research Committee, J. U. Postles, Chairman, Committee on Postwar Planning Cooperation.

E. L. Sweeney, Chairman of the Committee on Revision of Gas Chemists' Handbook, was absent, but sent in a written report.

E. J. Boothby, Chairman-elect of the Manufactured Gas Department assured the Technical Section members of full cooperation and coordination of the work of the Manufactured Gas Department and the Technical Section.

A.G.A. Meritorious Service Medal Awarded to Michael Keane

Heroic action by Michael Keane, a fitter employed in the gas department of the Pacific Gas & Electric Company, San Francisco, was recognized at the annual meeting of the American Gas Association, Oct. 5th. Mr. Keane was awarded the American Gas Association Meritorious Service Medal for having performed the most outstanding meritorious act in the gas industry during the past year. The presentation was made by the association's president, Ernest R. Acker.

In the absence of Mr. Keane, the award was received in his behalf by R. E. Fisher, vice-president in charge of public relations and sales of the Pacific Gas & Electric Company. The heroic act for which Mr. Keane was awarded the medal is described in the citation as follows:

Michael Keane

"On March 23, 1944, Mr. Keane, together with his foreman answered an alarm for fire in a refinery reclaiming oil under Navy contract located in Oakland, California. The entire plant was a mass of flame. It was unsafe to cut the gas service at the main because of flaming oil over the street. In trying to turn off the gas supply, a fireman broke the valve. Mr. Keane donned an asbestos suit and, with water playing around him, succeeded in closing the valve, thereby putting out gas burning at the base of a drum containing 4,000 gallons of oil. The fire department was then able to control the fire, thus preventing its spread and probable explosion.

"Mr. Keane performed this courageous act in line of duty, undoubtedly saving human lives and property."

The American Gas Association Meritorious Service Medal consists of a gold medal, button and certificate, and is made possible through the generosity of the late Walter R. Addicks, senior vice-president of the Consolidated Gas Company of New York (now Consolidated Edison Company of New York, Inc.)

McCall's Magazine Awards Announced by American Gas Association

Winners of the 1944 McCall's Magazine Awards for outstanding contribution to the advancement of better living in the home, through the promotion of gas appliances and equipment, sponsored by "McCall's Magazine" and administered through the American Gas Association, were announced at the annual business meeting of the Association held October 5th in the Engineering Society's Building, in New York City. First prize, consisting of a War Bond and Stamps plus an engraved plaque, was awarded to Miss Mildred Clark, Home Service Director of the Oklahoma Natural Gas Company. Second, third, fourth and fifth prizes, consisting of War Bonds and Stamps plus an illuminated parchment went to Miss Jeannette Campbell, of the Minneapolis Gas Light Company; Miss Thelma Bly, of the Wisconsin Power and Light Company; Miss Hulda Ungericht, of the Ohio Fuel Gas Company; and Mrs. Helen Heiser of the Binghamton Gas Works.

Miss Clark's paper revealed the varied program she has carried out in the eight well functioning districts scattered all over the state of Oklahoma; and is a tribute to her outstanding ability as an organizer. An unusual project was carried on with junior groups—future homemakers—in the school economics classes. These meetings dramatized the "Kitchen Gremlins—Hasty, Wasty and Sly" and cleverly presented both a conservation program and a job of sound homemaking education. Miss Clark's work has been rewarded in her company's maintenance of full home service personnel throughout the war period.

PRIZE WINNERS OF McCALL'S MAGAZINE AWARD FOR 1944

Left to right: Miss Mildred Clark, Home Service Director, Oklahoma Natural Gas Company, Tulsa, first prize.

Miss Jeanette Campbell, Home Service Director, Minneapolis, Gas Light Company, second prize.

Miss Thelma Bly, Home Service Director, Wisconsin Power and Light Company, Fond du Lac, third prize.

Miss Hulda Ungericht, Home Service Director, Ohio Fuel Gas Company, Columbus, fourth prize.

Mrs. Helen Heiser, Home Service Director, Binghamton Gas Works, New York, fifth prize.

California Commission Grants Gas Tariff Revision at San Diego

By

Fred A. Herr

THE ABNORMAL conditions and peculiar problems with which gas utility firms operating in high-pressure war work areas find themselves confronted, were highlighted by a recent case which the San Diego Gas & Electric Co. had decided in its favor in August by the California Railroad Commission, the state's utility rate fixing agency.

This specific case dealt with a local San Diego problem but was of such a nature that comparable problems might well develop in any other section of the country in which a great influx of war workers has swollen the population far beyond the normal, in consequence of which housing facilities have been strained to a degree that the firms supplying gas, electricity and other utility services find themselves faced with problems and volumes of service not contemplated by existing rate structures.

In this connection, it must be mentioned that the lack of housing for war plant workers in San Diego and adjacent areas of San Diego County has been and is so acute that large-scale Federally sponsored housing projects are being initiated at a nearly continuous rate to keep pace with the demands from incoming defense plant workers.

Schedule Revision Demanded

In the San Diego Gas & Electric Co.'s recent case, which the State Railroad Commission in August decided in the company's favor, the firm sought authority to revise its gas tariff schedules so as to more clearly express the limitations under which service may be supplied to large housing projects.

For this purpose, the company filed a prescribed revision of its Schedules N-1 and N-2, applicable to general gas service; its Schedule G-3, applicable to multiple family housing service; and its preliminary statement in the tariff schedule which outlined general features respecting the character and availability of service.

The "N" schedules, in their existing form, the company advised the CRC, limited service through single or master meters to apartment houses, multiple dwelling units or housing projects consisting of not more than 150 individual apartments or more than 40 separate buildings. The limitations specified were not a part of the schedule as originally filed, but had been added at a subsequent date when it became apparent that in the case of large multiple family dwellings, particularly of the magnitude developed by war needs, substantially all of the gas would be supplied at the rate in the terminal block of the schedule, thus resulting in an average rate too low for the service rendered.

Schedule G-3 was designed to meet the needs for larger housing developments and at the same time maintain an average rate not inconsistent with the cost of rendering the service. Such resultant average, however, the company reported, is higher than obtained for the general service schedules (N-1 and N-2) for multiple units. But not higher in relation to payments by the great bulk of the firm's general customers served under the "N" tariffs.

Sectionalize Housing Projects

The San Diego Gas & Electric Co. informed the State Railroad Commission that this differential caused the firm to be confronted with requests from Federal agencies to be permitted to *sectionalize* large projects so that there would be not more than 150 apartments nor more than 40 buildings to each meter, thus qualifying each section for service under the "N" schedules. The company set forth as its position on the matter that the "N" schedules do not permit any such interpretation; however, in order to foreclose any possibility of construing the tariffs in that manner, it desired a ruling from the commission for the essential purpose of clarifying the terms.

In this respect, the company pointed out in its application, the term "premises," as defined in the preliminary statement of its tariff on file with the CRC, is as follows:

> **". . . an integral parcel of land undivided by public highways or railways in the case of industrial, agricultural, oil-field and resort enterprises, or quasi-public institutions."**

The company requested permission to have the wording of that clause in its filed tariff changed to read:

> **". . . an integral parcel of land undivided by dedicated streets, alleys, public highways or railways."**

The utility firm also asked authority to amend its Schedules N-1 and N-2 by the inclusion of a special condition to the effect that:

> **". . . A single enterprise containing more than 40 separate buildings or more than 150 individual dwelling units, or a single premise, may not be served under this schedule through several master meters where more than a single building is served by each meter, nor may any apartment building containing more than 150 in dividual apartments be served under this schedule through several master meters where more than a single apartment is served by each meter."**

Permission to Change Granted

Modifications and changes in its schedules G-3 were requested by the company to provide for a reduction in the first block (800 cu. ft.) per apartment from 10c to 9c per 100 cu. ft., and, in the event no space heating is used, a reduction in the rate for all additional gas from 7c to 5c per 100 cu. ft. The company also asked that the present restrictions as to the number of housing units required to qualify, be removed from the schedule and the schedule be made to apply to all multiple dwelling enterprises, whether of a governmental nature or otherwise.

In its order, granting, as of August 13, the company's request for making the various changes and modifications in its schedules set forth, the State Railroad Commission took the position that while at this time and under the circumstances obtaining the proposed changes should be permitted, such authorization, nevertheless, should be regarded as permissible only until such time as a more comprehensive view of the San Diego Gas and Electric Co.'s rates and practices can be made.

Gas Service in Atlanta

A booklet is issued by the Industrial Bureau of the Atlanta Chamber of Commerce giving facts and figures about Atlanta, its growth and industrial status.

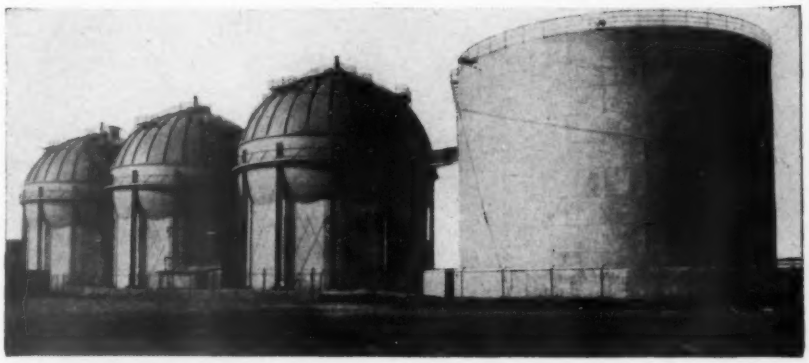
Included is a chart showing increase in gas meters in service. The figure for January 1st, 1926, is 43,341 and for 1944, 75,821, the curve being almost constantly on the up-trend.

Destructive Fire at the Gas Liquefying Plant of The East Ohio Gas Company

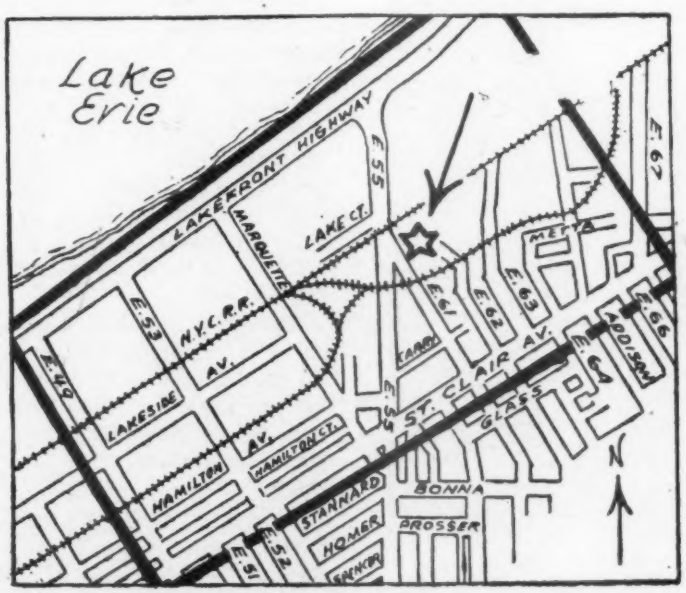
AT 2:30 P.M. Friday, October 20, 1944 as closely as timing is possible, and for reasons not now known, the largest of the four containers, which was added two years after the original plant was installed, and in which The East Ohio Gas Company had stored liquefied natural gas for use against possible peak demands next winter gave way.

The wreckage of this container which, in its turn, damaged the container next to it, released large quantities of liquefied gas which, upon exposure to the air, re-gasified and ignited from unknown sources. The burning gas was carried by the wind principally eastward, destroying practically every building of the Company on its premises. In addition, some 200 dwelling houses and buildings in the neighborhood were destroyed or rendered uninhabitable.

The cause is a complete mystery at this writing. It is remarkable that in spite of the heat of burning gases and other causes, two of the liquid gas tanks remained intact and a two million foot gas holder, in a masonry tank nearby, partly filled with gas in its natural form, withstood the intense heat of the fire. This gas did not ignite although the flames roared all around it for several hours. The two remaining liquid gas tanks have been drained of their contents by regasifying the contents into the gas distributing mains in the normal manner.



The three storage spheres and the cylindrical holder shortly after the completion of the latter.



This map shows the area affected by the East Ohio Gas fire. Arrow points to the location of the storage spheres and gas holders.

It was stated that no liquefying or regasifying processes were under way at the time of the explosion. In case there had been any overflow from the bottoms of the liquid gas tanks, this liquid would have drained into an old gas holder well, adjoining the liquid storage tanks and evaporated harmlessly through a vent into the atmosphere.

Several minor explosions followed at intervals as the fire spread. Some were pools of liquid gas exploding and others in the gas mains in the vicinity.

The American Gas Association Laboratories is located on East 62nd Street, only about four hundred feet from the storage tanks. An observer in the laboratories building said that one of the liquid storage tanks burst at the seams and sent the frosty-looking gas flowing swiftly along the adjoining railroad switch track. The moving gas along the switch and

1: General view shows two remaining spheres intact. 2: Close-up shows remains of cylindrical and one spherical holder, also one of the two remaining spheres. 3: Twisted steel from destroyed tanks. Holder in the background was only scorched.

later in the street, may have been ignited by a spark or the gas may have become ignited from a flame in a house it passed.

The East Ohio Gas Company started a thorough investigation as soon as possible after the fire, to ascertain if possible the cause of the disaster. Mayor I. J. Lausche of Cleveland has also appointed a ten member board of inquiry to make an impartial investigation and finding of facts.

Virtually all of the employees in Plant 2, who would have been in a position to give expert testimony as to the cause, were killed or are missing.

Gas Company officials have assured the public that there will be plenty of gas for both domestic and industrial uses. The gas contained in the four liquid gas tanks constituted little more than one day's supply. The plant and three storage spheres were originally constructed to build up a gas reserve to be drawn on to meet emergencies or peak load demands during the winter months, or at any time when the demand for gas temporarily increased.

J. French Robinson, President of the company, stated that every effort will be made to facilitate the numerous investigations now being conducted and that the company has had and will have responsible officials available to assist in every way.

As of October 28th, the loss of life is estimated at 175 including 71 gas company employees. There has been 36 of the employees identified and there are still 35 missing. Many of the employees were key men in the operation of the Cleveland distribution system. Identification of the dead is in many cases impossible, which accounts for continuing uncertainty as to the exact number who were killed.

The plant site covers an area of 14 acres, upon which the operating plant of the Cleveland distribution system, consisting of some nine buildings, in addition to the liquefaction plant, was located.

The three original liquid storage tanks erected during 1940 were built in the form of concentric spheres separated by three feet of cork insulation. For the lower part of the insulation block cork was used with granular cork for the upper part.

Each inner sphere, 57 feet in di-

ameter, was made of a special steel, .09% carbon and 3½% nickel, all arc welded construction.

The outer spheres, 63 feet in diameter were built of tank steel, supported by twelve legs resting on concrete foundations.

The fourth tank, added in 1943 (see photo page 19), was of torosegmental type. The outer shell was 76 feet in diameter by 51 feet high with three feet of insulation between it and the inner shell of nickel steel.

This tank and the adjoining sphere were completely destroyed, the other two spheres remaining intact and drained of their contents following the explosion.

The East Ohio's liquefaction plant is the only one of its kind in the world, as far as is known. It has been in successful operation for four years, and at the time of the accident held, in liquid form, the equivalent of 240,000,000 cubic feet of natural gas, of which the three original spheres represented capacities of 50,000,000 cubic feet each and one container, added later, 90,000,000 cubic feet.

The A.G.A. Laboratories building suffered damage. Eight employees were injured and are in the hospital. Two were badly injured. The latest report is that all but one will recover.

The Laboratories have accepted the offer of the American Society of Heating and Ventilating Engineers to use their research laboratory at 10700 Euclid Avenue ,temporarily.

Inspection of the laboratories shows that the north side of the building was badly damaged by the fire, which also destroyed furniture, fixtures and records, as well as a considerable amount of the laboratory equipment.

The production of oxygen regulators for the air force is expected to proceed early in November, and Mr. Conner, Director, hopes to resume domestic gas research by the middle of November and may soon reach 50 per cent of normal. Some of this work will likely be transferred to Los Angeles.

The East Ohio Gas Company, through Mr. J. French Robinson, President, has announced its intention to rebuild and re-equip the Laboratories.

4: Sphere on the right destroyed, others intact. 5: Clearing away the rubble when searching the ruins. 6: Shows wreckage of plant buildings including offices. In the foreground mineral wool insulation from destroyed cylindrical holder.

If you NEED it now
"... and it can be installed without skilled labor."

You can GET it now

If a shipment of pipe is necessary for the maintenance of your distribution system at something like reasonable efficiency, you can get that pipe *now* if you order cast iron pipe. To meet just such situations, our members are carrying ample stocks of both mechanical joint pipe and bell-and-spigot pipe on their storage yards. In addition, the Office of War Utilities of the War Production Board, recognizing that gas is indispensable to many war industries, as well as homes, *wants* you to maintain your gas distribution system at requisite efficiency to meet existing demand.

☆ ☆ ☆

Every experienced distribution engineer knows that cast iron pipe is long-lived and economical (the first cast iron gas main laid by the first gas company in America is still in service). He also knows that cast iron pipe is available with mechanical joints, tested by the A.G.A. Laboratory, and proved in the field to be bottle-tight under high pressures. And he also knows that mechanical joint cast iron pipe can be quickly and easily installed without skilled labor.

For further information, address Cast Iron Pipe Research Association, Thomas F. Wolfe, Research Engineer, Peoples Gas Building, Chicago 3.

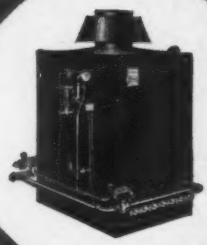
CAST IRON PIPE
RESEARCH ASSOCIATION, CHICAGO 3
CAST IRON
NO. 1 TAX SAVER

GAS-FIRED

AMERICAN HEATING EQUIPMENT

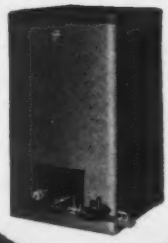
Gets the most out of Gas Fuel!

EMPIRE GAS BOILER

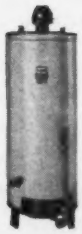


STANDARD GAS BOILER

MOHAWK GAS FIRED WINTER AIR CONDITIONER

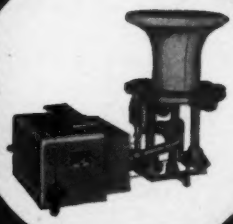


SHAWNEE GAS FIRED WARM AIR FURNACE

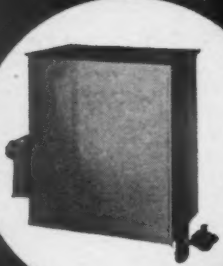


BUDGET GAS FIRED WATER HEATER

AMERICAN GAS FIRED STEAM RADIATOR



AMERICAN GAS CONVERTER



SAGINAW GAS FLOOR FURNACE

These outstanding products have the right design and precision controls to get the most out of gas fuel. They make satisfied users. You can sell or recommend them with complete confidence in their outstanding quality and dependability.

The complete line of products, some of which are shown here, meets every requirement of heating and hot water supply. Many are available for essential uses under WPB Limitation Orders; others probably cannot be furnished until the war is won.

Inquiries regarding the availability of any of our products are invited.

AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

New York Pittsburgh

The Gas Industry's New Equation

1+1=4?

By

William J. Schmidt

General Sales Manager
Long Island Lighting Company
Mineola, N. Y.

W. J. Schmidt

IT does not require a "Quiz Kid" to tell you that one and one make two . . . that is fundamental to nearly all people except those members of the gas industry interested in automatic gas water heaters. These individuals, if they are progressive and know their load builders, will insist that one and one make four! "How can that be?" will undoubtedly be the retort of most people who will be inclined to take the gas man by the hand and lead him gently to a nice quiet institution for the mentally deranged.

However, the well-informed gas man can prove that one automatic gas water heater is the equivalent (in total consumption) of two domestic gas ranges, or in a majority of cases, the equivalent of one domestic gas range and one gas refrigerator. Thus, one automatic gas water heater plus another automatic gas water heater are really the equivalent of four gas ranges! Some companies have already determined the truth of these equations by making studies of their records and I strongly recommend to the skeptic that he convince himself by doing likewise.

The victory garden is an outgrowth of our war situation and it proved that necessity still may be considered the mother of invention. The serious shortages of competitive fuels taught users of coal and oil that hot water is not supplied free with these media any more than it is with gas. These people could not be convinced of this truth by gas company salesmen in past years but they have learned the hard way since Pearl Harbor. Many of them have been besieging gas company sales departments for automatic gas water heaters after a few distressing and losing bouts with their local ration boards who relentlessly refused requests for additional oil or coal coupons to supply domestic hot water.

"Opportunity knocks but once" is an old axiom and our industry must not miss its chance to capitalize on the present situation. At the present time opportunity is battering down our doors. BUT if we are deaf to its calling, we may never again enjoy the favorable situation which now confronts us.

Since no market ever can be exploited successfully without definite preliminary planning having been established, let us take a close look at some factors which should insure a certain degree of success in promoting the sale of automatic gas water heaters in large volume.

A Ten-Point Program

First: A promotional or incentive rate for water heating service should be made available.

Second: Survey the potentialities of the territory involved. A complete sales program should be set up in detail. Have it tailor-made to fit the territory. Don't try to make Tom's suit fit Dick or Harry!

Third: Immediate steps should be taken to build an aggressive sales force of sufficient size to cover completely the territory involved.

Fourth: Sales personnel should be trained intensively in all phases of water heating.

Fifth: A compensation plan, which will enable the Gas Company to secure high-type sales representatives and pay them liberally, should be inaugurated. Undoubtedly sales compensation will be scaled upward by all industries following the return to peacetime markets. We must place ourselves in a competitive position with all others who are determined to secure their share of the customer's dollar.

Sixth: A rental plan and free trial offer for automatic gas water heaters should be considered for the period after Government credit regulations have been suitably modified or lifted entirely.

Seventh: Offer an incentive plan to replace existing tank heaters (now used during summer months only).

Eighth: Offer an incentive plan to encourage salesmen and customers to replace furnace coils (both oil and coal).

Ninth: Straight Gas Companies should consider combination sales of automatic electric washers and automatic gas water heaters either direct or through their cooperative dealer arrangements. The sale of complete laundry equipment "packages" including an automatic gas water heater, a gas tumbler dryer, an automatic electric washer, and an electric ironer is something which should not be neglected. Our industry recommends selling complete or so-called coordinated kitchens to secure the cooking and refrigeration load, why not complete laundries where the revenue from an automatic gas water heater and gas tumbler dryer is greater?

Tenth: Local and national advertising programs which will cover all phases should be an absolute "MUST". Few well-informed gas men will contradict the statement that the majority of people recognize gas as the preferred fuel for house heating and water heating. What is the basic reason people do not use gas for water heating? They have never been convinced this service is not prohibitive in cost of operation! We can place the blame for this condition right on our own doorstep since no consistent or concentrated effort ever has been made by our industry to educate these folks by presenting the facts in plain language. Too many people remember bygone days when promotional gas rates did not exist and automatic gas water heating equipment was far less efficient than it is today. We will never have a

better time to do this educational job than we have at our fingertips right now. Such a program could be divided into at least the following four major sections—

Major Activities

A. "Scare" advertising—tell the bacteria story in much the same manner as we did on the below 50° refrigeration promotion.

B. Develop a new dishwashing technique for the housewife by consistently advertising the necessity for an adequate supply of *really* hot water. The company I represent has embarked on this subject. A folder is mailed with every bill for gas or electric service and we will follow this up at periodic intervals with similar bill enclosures.

The average housewife does not appreciate the fact that she washes dishes *over 1000 times each year.* Laundry equipment is extremely popular and home laundry is only done once or twice each week—52 to 104 times per year. Any relief from dishwashing drudgery will be welcomed by the housewives of America.

Indirectly, such advertising may promote the sale of electric dishwashers but we must not be narrow-minded. This appliance needs an adequate supply of *really* hot water and like the automatic electric clothes washer the revenue derived by the gas company for supplying the required amounts of hot water far exceeds the return realized by the electric utility—(approximately 5 to 1 in each case)!

We can be assured manufacturers of electric dishwashers and automatic electric clothes washers will promote the sale of automatic water heaters because their appliances cannot operate satisfactorily without an automatic supply of really hot water. Since we can furnish this supply of hot water better and more economically with gas, why shouldn't we pursue this profitable market aggressively? We have always boasted our main objective being loadbuilding and merchandising is only a means to this end. Our attitude should be broad enough to let competition earn one dollar any time we can earn five dollars on the same deal.

Tabulation of Recommended Procedure

	Utility	Manufacturer	A.G.A.
Offer an inducement or promotional rate for water heating	x		
Survey potentialities of territory	x	x	
Set up a *complete* sales program	x	x	
Build an aggressive sales force large enough to give full coverage	x	x	
Train Salesmen *thoroughly*	x	x	
Compensate Salesmen *liberally*	x	x	
Sell complete laundry equipment	x		
Educate Dealers	x	x	
Set up complete and continuous advertising program featuring items enumerated above	x	x	x
Build more efficient equipment. Heaters of improved appearance necessary for kitchen and first-floor utility room installations		x	
Conduct constant research to improve present equipment and discover new uses for gas as a fuel		x	x
Foster CP water heater promotion	x	x	x
Include hot water presentations in all Home Service Demonstrations and tie-in that department to help water heating promotion. Dishwashing fits the picture admirably	x		x

There are indications that a gas dishwasher will make its appearance within a reasonable time after peace comes. If and when it arrives on the appliance market our advertising theme can be altered to place due emphasis on the virtues of the "new-arrival." The prospects of this new device should not lead us into a policy of watchful waiting since gas heated water consumption is our main objective. All gas or electric appliances which require hot water for successful operation can help our program and advertising of the right kind will be an important factor in securing maximum results.

A new threat is scheduled to appear on our competitive horizon in the form of a detergent which will make it unnecessary to use hot water! It

is presently used by the Navy and large industrial concerns who can furnish suitable priorities. It is described as follows: "Truly the all-purpose chemical cleaner that makes suds instantly in *sea water,* hard water, or any kind of water, hot or cold! Its properties are germicidal, fungicidal, bacteria-static, and automatically antiseptic. Cleans lipstick from glassware instantly!" Products like this give us another good reason to advertise effectively and continuously. Perhaps our industry should enlist the cooperation of the soap industry since they would be affected in like manner. At least it gives us food for serious thought.

C. Stop all advertising which features construction details, technical descriptions of equipment, etc., and publicize the convenience of and necessity for an automatically controlled supply of really hot water.

D. Feature the service which the user of an automatic gas water heater gets for a nominal cost. This service extends from basement to attic and gas men should not overlook the water heating load when calculating revenues derived from kitchen appliances. Many post-war homes without basements will elevate the automatic gas water heater to the kitchen or first floor utility

room. It has ceased to be a basement appliance! Modern automatic gas water heaters provide 5 to 7 gallons of *really* hot water for one cent (depending upon the rate for manufactured gas). Where natural gas is used, far greater amounts of hot water—from 12 to 18 gallons—can be secured for one cent depending on- the rate. Even off-peak electric water heating service costs more. Our advertising must tell people what we give them for their money. Emphasize the convenience automatic hot water service provides for every member of the family—from the baby's bath to the old man's shave! There is glamor in adequate hot water service—let's tell people about it!

The CP water heater program is one instrument which can greatly assist us in our efforts to put automatic gas water heating service in its proper place at the head of the list of gas industry activities. It should have the active support of utilities and manufacturers alike. Cooperative and concentrated effort by all concerned can make the CP water heater a reality and nothing should be permitted to hinder its adoption at an early date.

By way of summarizing the various recommendations contained herein, the adjoining tabulation attempts to show the part to be played by those most vitally interested in promoting the sale of automatic gas water heaters.

It is a certainty that the electric industry will pursue the water heating market as aggressively as they have the cooking field. On January 1, 1944, there were more than 3,500,000 electric ranges and approximately 1,100,000 electric water heaters in use. Our experience has proven that electric water heater sales increase much more rapidly when electric range sales surge upward. Electric industry promotions will make it imperative for us to keep everlastingly on our toes if we are to dominate the field of automatic water heating!

Statistics prove that electric equipment requires more than three times as much service and maintenance expense as gas equipment. Our story should acquaint prospects with these facts! Let's take off the white kid gloves and start punching with our sleeves rolled up and our knuckles bared!

No experienced gas man will deny the fact that a cooking customer, alone, is a borderline case when it comes to the net profit column on the balance sheet. Many will admit such customers are served at a loss!

In the coming post war years, the automatic gas water heater is the key to the door marked "Increased MCF per Customer." It should not be permitted to rust on our keyrings!

Architects Manual Nears Completion

The "Architects Manual of Modern Gas Service" which is being prepared by the Subcommittee on Publicity and Specifications of the Committee on Housing, Residential Gas Section, American Gas Association, is now nearing completion. The work has progressed to a point where the first draft of all sections except Section VI—Kitchen Planning have been finished and are ready for field review prior to the final printing.

Many copies of this first draft are already in the hands of gas companies for the criticism and advice of their various interested departments.

The work of preparing this first draft has been done by small committees of individuals after which the developed material was reviewed in detail by the Subcommittee on Publicity and Specifications which is under the chairmanship of H. P. Morehouse. The major part of the detail of handling this big undertaking was carried on by F. W. Williams of Headquarters Staff.

The Manual will contain twelve sections, each prepared by a committee group. The sections are:

1. Foreword.
2. Gas Piping.
3. Chimney, Flues and Vents.
4. Gas Cooking.
5. Gas Refrigeration.
6. Kitchen Planning.
7. Gas Water Heating.
8. Gas Heating.
9. All Year Air Conditioning.
10. Modern Home Laundry.
11. Basements and Utility Rooms.
12. New Developments.

The committee, through a wire sampling of gas company opinion, hopes to compromise differences in practices to the point where this material can be used by all architects and builders to improve installation practices.

An important feature of the Manual is the standardization of manufacturers appliance data sheets so that the user of the Manual can quickly find dimensional and other needed specification data. All domestic gas appliance manufacturers have been furnished with a specimen data sheet and many have already expressed their desire to make these data sheets available.

It is the aim of the Committee on Housing and the Subcommittee on Publicity and Specifications to make available a handbook which will accomplish three aims:

(1) To put into the hands of architects and builders through the utilities, a reliable Manual which will cover all phases of the use of gas in the home and will guide them in the selection of equipment and recommended installation practices.

(2) Impress the architects and builders with the alertness and progressiveness of the gas industry by making the Manual attractive, complete and accurate.

(3) Supply the gas industry with a vehicle by which they can make frequent logical and helpful call backs on architects and builders by keeping the Manual up-to-date.

Such a program can only be attained if we have the constructive help of all interested parties. The Committee have set up basis for approach and discussion in the first draft. We look to the industry for guidance so that the finished copies may accomplish the above aim.

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"B" TYPE METERS
DIAPHRAGMS

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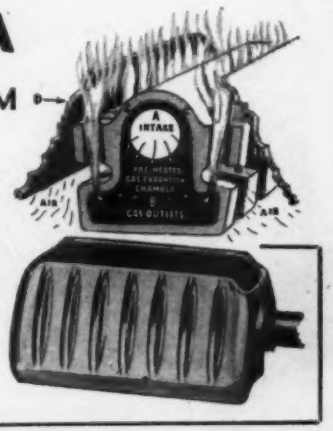
A small unit which may be used singly or in series. Each unit 6½ in. long x 4 in. wide. Wide application of domestic and commercial uses. May be used in round or square steam or hot water boilers, warm air furnaces, Arcola type heaters and circulating heaters. Used commercially for heating tanks, boilers, ranges, ovens, etc. Natural, manufactured, or mixed gas. Complete combustion without pre-mixing. Write for circular.



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Time is the fundamental measure of a practical refractory.

Long life is the practical result of using CRYSTOLON (silicon carbide) brick.

That is the reason for the ever increasing use of CRYSTOLON brick in generators of water gas sets.

We will gladly provide you with technical reasons why these high temperature brick have stood up for more than 20,000 hours of gas-making time, have quickly paid for themselves with savings in cleaning costs alone.

NORTON COMPANY WORCESTER 6, MASSACHUSETTS

Plant Operating Problems Caused by Changes in Characteristics of Enrichment Oils

By

Edgar G. Rhodes

New Britain Gas Light Co.
New Britain, Conn.

IT has been nearly three years since U boats started to cavort along our eastern shore line and take pot shots at our "sitting duck" tankers. During this war period we water gas operators of New England have experienced, and are experiencing, chaotic and changing oil conditions. We have experienced variations in what were formerly uniform oils and shortages of accustomed types, with consequent changing to unknown types, pooled oils of varied mixtures and in general poorer quality oils than we had been accustomed to use.

In order to get data for this paper, an inquiry was directed to a group of New England Gas Companies, requesting them to furnish information on the problems which they had experienced due to changes in type and quality of enrichment oil. Replies were received from only fifty per cent of the Companies and I am assuming that the rest of the Companies had such minor difficulties that they were not worth reporting. In treating this subject, no consideration was given to the economics of the various oils used, as I am only interested in our ability to put oil through our sets, keep the plant running and keep the holders and B.T.U. up.

Apparently those plants which had always used gas oil, and were still able to obtain a fairly good grade of the same, experienced no difficulty. One plant, however, reports that they have been experiencing Silica deposits on their carburettor checker bricks. The condition became so bad that it was necessary to rechecker the carburettor after less than 200 hours of operation. The deposit was of a light powdery consistency, varying from grayish white to pinkish red. Some of it formed as barnacles on the crowns of generator and carburettor. An analysis of the deposit showed it to be as high as 88% silica. It is thought to be vaporized ash from running too hot a fire, or from blowing a cold machine too fast.

They have no conclusive evidence as yet on how to eliminate the condition. They are trying a small amount of steam with the blow to generate some blue gas with the blast gases so that the checkers may be heated with less heat in the generator fire. Also, a shorter cycle and different steam rates are being tried with the object of preventing the fire, especially the top, from becoming too hot and carrying over vaporized ash to condense on the relatively cool checkers. A good many other New England Companies are using the same coke as this company, without having encountered any such problem.

Those plants which were using heavy oils in the main had no real difficulties. Changes in heats, cycles, and operating conditions took care of variations in the oils received. However, one such plant reporting on use of one shipment of a #5 fuel oil, finally had to abandon its use after ten weeks operation. Blending with good oils and changes of operating procedures did not improve conditions sufficiently to justify its continued use. Carbon deposits built up too fast to enable them to keep their sets clean. But in general, where plants were properly equipped for, and experienced in, enriching with heavy oils and handling tar emulsions, only minor difficulties, such as excess carbon deposits in the base of the carburettor, were reported.

The main troubles were encountered by those plants which were equipped only for light gas oil use and had to swing over to heavier grades of oil. They were bedeviled with carbon plugged checkers and tar emulsions everywhere. Careful attention to operating cycles, steam, and air rates, mitigated their troubles somewhat, but they were compelled to change checkers constantly, and rig up makeshift apparatus for reducing tar emulsions. One straight gas oil plant reported a peculiar condition. They had started to use an oil of 20.9 A.P.I., 4.4% carbon and an enriching value of 104,400 B.T.U. They obtained fairly good efficiencies at first, but after a few hundred hours of operation, oil results fell off, and investigation showed that the carburettor checkers had disintegrated, and large holes had appeared. Tests finally showed that the oil contained sufficient salt to lower the fusion point of the firebrick to a point where the checkers started to vanish. Nothing could be done about this other than to rechecker every 400 to 500 running hours.

For those men who are still having trouble with straight water gas sets, I would like to go into some detail about the changes which we made in New Britain. Previous to the war, we were using regular gas oil on a 10'0" Semet Solvay set with checkered carburettor, back run, and automatic charger. We were also reforming Bunker "C" oil through an Anthony spray in the dome of the generator, to lower generator fuel costs. In the late spring of 1941 we changed from gas oil to crude oil, first because operating costs were lowered, and secondly because we felt that, in case of war, a supply coming across country would be safer than one dependent upon coastwise tankers. Before making the change we ran tests on the crude oil and found it to give as good results as the gas oil we were using.

After we had run on crude oil for some time, efficiencies fell off and we found our carburettor plugged almost solid with carbon. The machine was rechecked and then began an attempt to overcome this plugging by changes in operation. One time we had to use pneumatic paving breakers to cut out the checkers and carbon. In the meantime, because of increase in cost, we had changed from reforming "Bunker C" to reforming tar, using the same tank pumps and spray for the tar, that we had used for the Bunker oil.

After frequent shut downs for rechecking, we decided to get drastic. We took all the checkers out of the carburettor and as an experiment built a square brick pier on top of the checker brick supporting tile and extending almost up to the generator

carburettor connection. With this arrangement we obtained just as good efficiencies as we had with the checkered carburettor until we filled the half of the carburettor next to the superheater with solid carbon. Again in went the paving breakers. But we liked the oil efficiencies, we liked the costs, and we were assured of a good supply, in spite of the fact that war was now on. For these reasons we didn't want to change oil unless necessary.

We then tore out all brickwork, except the walls, in the carburetor and installed a new 4½" inner lining from the floor to the dome to make the carburettor smaller and to give us a surface of new brickwork. In addition, and this we feel is the important item, we extended with brickwork, the carburettor-superheater connection to the center of the carburettor, in effect making a cone bottom carburettor with the outlet in the center of the bottom. We also cut down the area of this outlet to approximately the area of the angle connection. These changes were made to obtain more uniform heat distribution. Subsequent operation showed no increase in pressure through the set. Oil was still injected through the original Anthony spray in the top of the carburettor. We have been operating for over two years with this set-up and have not taken a pound of carbon out of the carburettor or superheater. The superheater checkers have been in use for over four years during all these experiences and still are in excellent condition.

For some time now we have been using a mixture of ⅓ crude oil and ⅔ oil of 20.2 A.P.I. gravity and reforming ½ gal. of tar per thousand feet of gas, and can find no carbon formation anywhere. Thus with very little expense, and a little brick which we had on hand, we converted our set from a gas oil set to one that can use heavy oil short of "Bunker C" and maybe some day we'll try to run with that.

During these war years the gas industry has been forced into using, and experimenting with, many varieties and mixtures of oils which we would not otherwise have bothered with. We have learned a lot individually and as an organization, and in the future should not be tied down too closely to any one type of oil in a plant. Following are some conclusions which seemed to be the general consensus of opinion of those who replied to the questionnaire sent out.

1. Mixtures of oils can be used that formerly were thought unusable. However, these mixed oils will not give as good operating efficiencies as would be obtained by running the oils separately and averaging the results obtained. Each run of oil has a set of operating conditions under which it gives maximum efficiency. When running mixtures of oils, some portions of the mixture will be undercracked and some portions overcracked, thus lowering the overall efficiency. In general it has been found better to overcrack than to undercrack mixtures.

2. Straight light oil sets can be operated with heavier grades of oil than were formerly thought usable. Carbon in checkers can be overcome by wide spacing of checkers or by eliminating them entirely.

3. Naphthalene problems due to overcracking have increased and some plants have found their existing naphthalene scrubbing equipment to be inadequate. This also holds true for tar extraction and tar handling equipment particularly in plants where no emulsions had previouslv been encountered.

In spite of the war and our difficulties, none of us has lost gas in the town due to lack of oil or ability to use that type of oil which we were able to obtain. We may have had to switch around a bit, and bite our nails a bit, but we have to admit two things. The oil industry put a liquid into our tanks and we made gas with it.

Presented at New England Gas Assn. Operating Division Meeting, Boston, Sept. 26, 1944.

We offer our best wishes to the American Gas Association toward the effective execution of the plan for Research and Promotional Development in the Gas Industry.

With the fullest cooperation and support of the entire membership, this program will meet the challenge of the post-war period with success—a success marked by increased business to the industry and a better service to the public. Never before has the opportunity been so great.

GPM
IRON HYDROXIDE

GAS PURIFYING MATERIALS COMPANY INC.
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W. E. Caine Appointed Chief Statistician A. G. A.

Appointment of Walter E. Caine as chief statistician of the American Gas Association has been announced by Ernest R. Acker, president of the association. He comes to the association from the Federal Power Commission where he was assistant chief of the Division of Rates and Research.

In his new post Mr. Caine will direct all activities of the Statistical Department. Plans are now under way to rebuild this department which has been considerably depleted in recent years through loss of personnel. In addition to compiling national gas industry statistics for both the natural and manufactured gas branches of the industry, Mr. Caine will be in charge of an enlarged program of statistical analysis and market research.

Mr. Caine's entire career has been in the field of public utility statistical and rate analysis, a background which will be most valuable in his present position.

Little Lessons in GAS PURIFICATION

No. 1 What is "ACTIVITY?"

"Activity" in a gas purifying material is its SWIFTNESS in absorbing H_2S.

Lesson No. 2
REVIVIFICATION

Power, in a gas purifying material, to regain its "pep" after use. An important factor in its *usefulness* and *economy*.

Lesson No. 4
PERFORMANCE

the sum total of "duties" done by a gas purifying material, and the thoroughness with which they are accomplished.

Lesson No. 3

SPONGE . . . A "fluffy" material—usually wood shavings—coated with ferric oxide to form an effective purifying material for dry box purification.

Maximum H_2S removal per lb. of Oxide!

That's what these lessons add up to when Lavino Activated Oxide is used. Its consistently high efficiency has convinced hundreds of gas plant engineers that, pound for pound, it absorbs more hydrogen sulphide than any other purifying material they have ever used.

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A.G.A.E.M. Postwar Planning Committee

IN the October issue of the JOURNAL was published the latest report of A. M. Beebee, Chairman, A.G.A. Postwar Planning Committee, and the reports of three subcommittee chairmen.

The A.G.A.E.M. Postwar Planning Committee, Frank H. Adams, Chairman, has issued a booklet titled "Comments and Recommendations." The comments and supporting discussion following each comment emphasize those points in the A.G.A. Postwar Planning Committee considered most important from the manufacturer's point of view.

In a statement by Mr. Beebee regarding the A.G.A.E.M. report, he states:

"Any cooperative enterprise, such as has been our Post War Planning Committee's activity of the American Gas Association, can only be effective if it is supported by all branches of the Industry.

"Our Committee has given a great deal of time and study to the subject of preparing the Gas Industry for the postwar period and have submitted a definite set of Recommendations which have been issued to the Industry.

"The objectives of our program and support to our Recommendations have been enthusiastically endorsed by the Gas Utility Industry in a most encouraging manner.

"The manufacturers of our Industry, as represented by the AGAEM have had their own Post War Committee and it is self-evident that they play a very important part in the success of any industry-wide program. It is, therefore, with great satisfaction that a report by the AGAEM Post War Planning Committee is brought to the attention of the Gas Utility Industry. From this report you will note a complete unanimity of thinking and a cooperative attitude that cannot help but bid for success. The utilities of the country are urged to carefully study the report of the AGAEM, as it will be found to contain much food for thought."

The following are abstracts from the booklet "Comments."

COMMENT No. 1

Immediate Action by Utility Officials on Their Postwar Plans is Necessary

We cannot emphasize too strongly that this contribution made by gas men for the gas industry be given the same conscientious study and application by utility management as has gone into its making. We should not hesitate to study, analyze and apply these findings to the benefit of individuals, groups and the industry. With this open-minded and appreciative attitude, the variables which may creep into sectionalized analyses and reports will be unimportant when supplemented and localized by the individual company or groups operating under different climatic conditions, rates, gas and acceptance.

That part of the recommendations just issued relating primarily to merchandising is of greatest direct interest to the manufacturers. Merchandising policies of the utilities directly affect and to a large extent determine the manufacturers' plans for distribution. Both interests have a common objective in securing a maximum public acceptance of gas service and should coordinate as fully as possible their merchandising efforts to reach this objective and thereby increase the stability and leadership of the gas industry.

It seems necessary, therefore, that the A.G.A. Postwar Planning Committee use every resource, through its committee of action and otherwise, to secure adequate dissemination and discussion of the reports by the general directing and sales management personnel of every utility so that they may be stimulated to action in applying the principles developed to their own individual postwar plans.

COMMENT No. 2

Each Utility Should Assume Leadership in Merchandising in its Area and Proceed Immediately to Organize its Sales Program

Undoubtedly, our postwar business world will be faced with many problems whose size and scope are still unknown. At the same time, it lies within the power of the managers of individual enterprise to set a pattern of activity and confidence which will do much to ease or solve some of the problems, whatever their size and scope. Unemployment is the most frequently expressed bar to any normal business activity. Yet each employer, be he large or small, can make a contribution to reduce unemployment the aggregate of which is far more sound and effective than anything the government can do. Somewhere between an unlimited optimism of unlimited markets and "wait and see" pessimism is a sound ground for making plans to use the inevitable surge of necessitous buying which will come as soon as materials are available to gain the momentum which will breed confidence and lay a foundation for working our way out of our war problems.

FRANK H. ADAMS

There is every reason to be confident and optimistic about what the Gas Industry can accomplish. To say we are going to be faced with the keenest and greatest competition the industry has ever faced is simply t

state a circumstance of the period we are in that applies to every industry. To say that no industry or product has a secure hold on public acceptance is only to be realistic about the opportunity and prize offered every successful merchandiser by the deferred purchasing and consumer cash reserves which have been built up during the war period. In tomorrow's market those merchandisers are going to have the greatest advantage who already have a foundation of public acceptance.

Both the manufacturer and the utility have an obligation in the rehabilitation of dealers. The utility because of its location and facilities has the immediate responsibility of establishing training programs and giving such other cooperation as will help make the dealer an effective outlet. The utility's willingness to maintain prices, terms and installation practices, to maintain for its own sales the same financing terms available to dealers, to eliminate concealed price advantages which inevitably result in dealer sales of inferior equipment, all are necessary steps in any dealer cooperation.

COMMENT No. 3

The Economic Phases of Utility New Business Activities Should be Studied by Each Utility and Coordinated by Various Utilities Whose Operations are Comparable so That Tested Standards May be Set Up as Guides to Sound Merchandising Plans

One of the phases of marketing in which there has been inadequate research and analysis of experience is in the sound limits of new business expense. It is most encouraging therefore to see so complete an analysis of a group of properties made available to the industry in Report No. 4 on "Engineering and Economic Phases of the Gas Industry." The relationship indicated between Sales Results and Salesman Power and, within the limits of their study, the relationship between Salesman Power and Net Operating Revenue Gain (Pg. 59, Report No. 4) should be both encouraging and a challenge to every utility to extend this type of study to their operations, particularly those pertaining to:

1. An evaluation of New Business Efforts.
2. Revenue Life of Appliances.
3. Salesman Power.
4. Minimum New Business Expense to hold Revenue.
5. Study of Aggressive vs. Passive New Business Efforts.

It would seem that such studies would be of great interest to regulatory commissions and of great value to the utilities in discussing with all government agencies the necessity and propriety of aggressive new business activity by the utilities.

In the postwar period sales organizations must be re-established. Ample manpower will be available perhaps by the time limitations and restrictions on production of equipment and gas usage are lifted. *The utility as a public servant has an obligation to employ as many men as practical in order to contribute to the establishment of a sound national economy.* Therefore, the industry is greatly indebted to Hall Henry for his report on "Salesman Power." He states:

> "Salesman Power is the one positive Measurable Force of all the many tools needed in an Economical sales program——" The best results (i.e. largest E.A.R. per customer and lowest costs per dollar E.A.R.) were obtained with less than 2000 meters per salesman on Domestic Sales and the same number on Heating——.
>
> "Total New Business Costs do not increase directly as the sales force increases but at a lesser rate."

COMMENT No. 4

The Utility Should so Organize its Merchandising Program as to Adequately Cover all Appliances

Home building and remodeling will become one of the greatest activities of the American public in the postwar era. Surveys indicate that the interest in postwar home building far exceeds any one other interest and the people who plan to build, buy or remodel in the immediate postwar period exceed the number who plan to purchase new automobiles or any other single item contributing to better living conditions. Competition is already creating preference for its services and merchandise in these markets. There is a danger that the gas industry will neglect its opportunity to capitalize on the greatest single interest of its customers until competition is difficult to supplant.

And so, quite properly, the A.G.A. Committee has included a series of recommendations regarding the potentialities and importance of various types of loads. These are:

1. Domestic Water Heating	(No. 10)
2. Refrigeration	(No. 10)
3. House Heating	(No. 11)
4. Year Around Air Conditioning	(No. 11)
5. Commercial	(No. 12)
6. Industrial	(No. 12)

Each market in the postwar period must be adequately covered and competently sold. It is good merchandising not to limit their planning to the new building field and ignore the replacement market, even though the sales department's sales and load quotas are met by the limited coverage. Gas companies must analyze and evaluate their coverage and competitive position in terms of their customer's use of gas service. It matters not whether he lives in an old or new house or whether their own salesmen cover the field or it is done by some other retail outlet.

Water heating is important as a home service, and because it is the most vulnerable point for electric competition, next to the range. Too many water heaters, particularly in manufactured gas territories, are not good exponents of adequate, economical gas service. It is a service which has been inadequately and improperly sold. The research work done by the A.G.A. Laboratories, under the Domestic Research Committee, is a revelation of the opportunity and need of an intensive education of salesmen and dealers on the relationship between burner capacity and draw-off.

The greatest threat today in the kitchen is not the electric range; it is not the cheap gas range, as weak and inadequate a gas service representative as it is. **The greatest threat is the obsolete gas range.** It is the greatest potential field on the gas company lines for the electric range. This is confirmed by a number of market surveys which have consistently shown a considerably larger percentage of gas range users who plan to change to electric than of electric range users who plan to change to gas.

COMMENT No. 5

Each Utility Should Establish a New Home Planning Department

With the constantly increasing public interest in home building and remodeling, we recommend that the utilities start at once to capitalize on this opportunity by establishing—

"A New Home Planning Department"

This department could be established under the supervision and direction of the Home Service Director, the Sales Manager, or someone connected with the sales or engineering divisions familiar with home construction, capable of organizing and disseminating information of interest to prospective new home owners or present owners planning to remodel.

This "new home planning department" if properly organized, publicized and promoted would establish the utility as the clearing house for the most practical and interesting information on postwar housing. This activity would automatically support and obtain the goodwill of the architect and builder and serve as a basis for increasing the scope of all postwar merchandising and sales effort.

COMMENT No. 6

Active Steps Should be Taken by A.G.A. to Carry Out the Elimination of Needless Appliance Requirements and the Reduction in Numbers of Models of Various Appliances

This committee hopes that the inclusion of Recommendation No. 18 on the elimination of needless appliance requirements and No. 19 on the unnecessary multiplicity of models as already indicated in the range survey represents real progress in the industry's understanding of this mutual problem.

The common expectation is for an increase in postwar over prewar prices. Industry's hope of maintaining employment and of not damming up the accumulated purchasing power is in holding these increases as low as possible. Increased volume of models to cover the national market is one of the most important factors in lowering costs. The elimination of special requirements for local territories is a more important factor in this direction than the gas utilities have to date given evidence of realizing.

COMMENT No. 7

Each Utility Should Study the Costs Included in Retail Prices for Sales and Installation to Keep Retail Prices from Being Unnecessarily Inflated

In the control of prices to the ultimate purchaser, the gas utility should recognize its need and the opportunity it has to maintain the same efficiency of operation and control of expense incident to sales and installation as it expects of the manufacturer. In many cases the potential reductions in cost and prices are much greater here than in anything the manufacturer can possibly do.

COMMENT No. 8

Cooperation With Liquefied Petroleum Gas Industry

We believe the utilities should aggressively set up a policy of cooperating with the liquefied petroleum gas industry as the only available means of adequately meeting the encroachment of the competition of other fuels and the future expansion of its own gas service.

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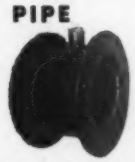
Cutaway view of typical Dresser Repair Sleeve, showing how it permanently repairs pipe or pipe joints. Style 73 encloses screw and welded joints or holes in pipe up to 8" in length. Maximum working pressure, 250 psi. Sizes 2"—12" ID.



DRESSER REPAIR SLEEVE, STYLE 93

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Infra-Red Paint Drying With Gas

By
Wm. H. Tesmer,

Chief Engineer
Burdett Manufacturing Company

PAST discussion of infra-red heating has dealt with processing as accomplished by both lamp and refractory type burners, yet actual comparison has been limited. Both of these methods have their individual advantages, although in general strive for the same results.

It must be conceded that the infra-red lamp (electrical) has decided advantages in portability such as may be required in large unit production where mobility is not convenient, or where localized drying of touch-ups, etc., are regularly essential. Highly volatile substances such as cellulose, etc., will also demand lamp drying due to the absence of open combustion.

In the case of the electric infra-red lamp, however, any attempt to appreciably alter the time or drying cycle, in the process of paint drying as an example, will necessitate reformulation of the paint used. This is not true with the infra-red gas burner, using the Burdett infra-red principle burners with applied recirculating heat as a basis of discussion.

With infra-red gas burners the drying cycle is not materially affected by the color of the paints such as black and white, nor are short cycles created by highly reflected surfaces such as chrome bumpers with painted letters inscribed, which decidedly alter the drying cycle of electric lamps.

The infra-red gas burner, when employed with a recirculating system, will offer decided advantage such as 90% lower fuel cost, and will equal or better speed of production as compared with lamps and provide up to 300% increase in production as compared with indirect fired equipment, without reformulation of paints. In the case of ammunition chests or similar metal chests, the infra-red gas burner will dry the inside finish with equal speed and thoroughness as the outside, simultaneously, which is not possible with the infra-red electric lamp. Similarly wrinkle, hammerloids, clear, black and white finishes, square, round and odd shaped objects of varying thicknesses of material can be run through side by side, with perfect results requiring no change of speed or temperature, as would be required in the use of electric lamps.

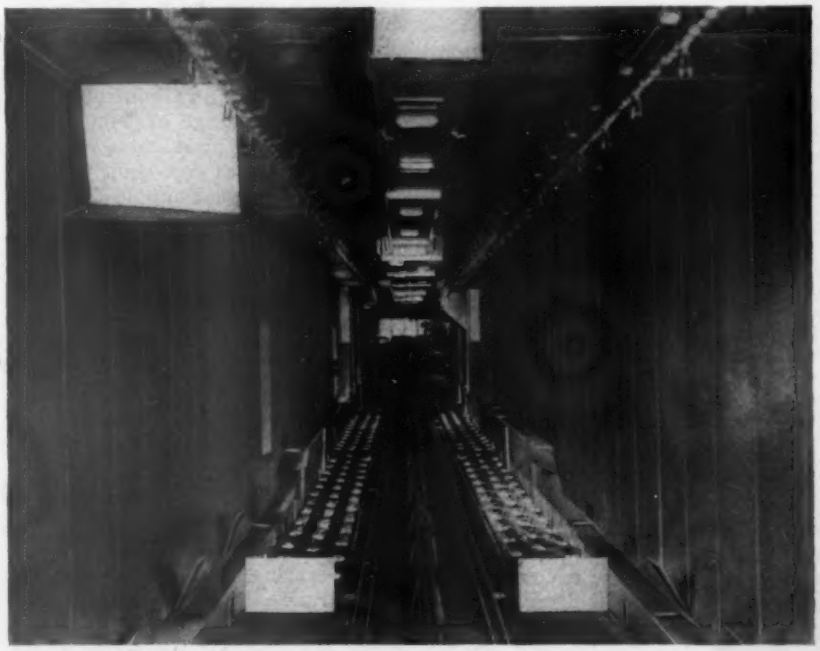
The design of the infra-red gas burner (Burdett) is such that a paint drying oven is in no way limited to a single size or shape of object, and it is not necessary for the burners to be mounted so as to focus the infra-red radiation to completely cover a painted object.

Referring to a typical infra-red gas burner installation in Chicago, where the oven is 40′ long, 16′ wide, 12′ high, a 12′ wide bar-type conveyor passes through the oven. Various sizes of painted parts are hung on this bar with the parts ranging from large radio cabinets to small pieces for the construction of radio cabinets. Paints range from black wrinkles to glossy whites. The time and temperatures are identical on all pieces. The type of finish on all pieces meet strict Army specifications.

In the case of infra-red electric lamps it would be necessary to set up a tunnel in which all parts have to be closely related in size, shape and thickness of material to obtain equal drying, since it is necessary to focus a complete bank of lamps with fairly equal distribution of infra-red rays on all parts of the object. If it is necessary to run various colors through the infra-red electric lamps, it will be necessary to reformulate each individual color to dry at the specified time. Should the objects be of widely varying metal thicknesses it is almost an impossibility to dry them at the same speed and temperature. Infra-red lamps are greatly affected by blacks, reds and whites. They are very capable of drying a black object, but if the same object is painted red or white, the drying time cycle is affected greatly. In some cases it may be doubled compared to the black.

Gas Burner Control

In control of time and temperature the versatility of the infra-red gas burner is by far greater than the infra-red electric lamp. This is brought about due to the ability of being able to control the BTU input of the individual burner, thus controlling any set temperature over a wide range. On a normal infra-red gas installation any predetermined



Interior of converted oven using infra-red gas burners. Monorail Conveyors overhead travel in opposite directions. Floor conveyor is used for heavy products.

temperature can be obtained from approximately 175°F., to 400°F., by adjusting the temperature controller accordingly. This makes it possible to apply more heat to an object without changing conveyor speeds or adding combustion equipment as would be necessary with infra-red electric lamps. This point can be brought out by the following:

In the case of a particular type paint that may bake for 10 minutes at 275°F., 7 minutes at 300°F., or 5 minutes at 325°F., it would be possible in the infra-red gas equipment to adjust the temperature controller to obtain the various temperatures required for the baking process, then speeding up the conveyor accordingly. However, in the case of infra-red electric lamps it would be necessary to add more lamps or to slow down the conveyor to obtain more temperature. The slowing up of the conveyor would greatly affect the predetermined time cycle. It is possible with infra-red electric lamps to vary the distance from the lamp to the object to be dried and obtain varying temperatures. However, this proves impractical, due to the fact that the closer the lamps are to the particular object the more limited the size of the tunnel becomes and also there is a greater possibility of spotting or over-baking and under-baking various parts of the object due to sharper focal points.

The use of recirculating systems with infra-red lamps has proved unsatisfactory because of the cooling effect, and consequently limiting of temperatures, whereas with the infra-red gas burners the recirculation of hot air not only aids the speed of production, and reduces fuel consumption, but provides a pure oven atmosphere continuously drawing all foul air out.

Operating Costs

Comparison of fuel consumption in gas and electric in cost of BTU, regardless of the type of equipment involved, gas costs are generally lower per BTU than electricity. In the case of Burdett equipment compared to that of the infra-red lamp, far reaching experience has shown that this equipment will operate at 1/10 the operating cost of infra-red lamps on equal installations. Maintenance costs are very low since little or no replacements are necessary. In the case of infra-red lamps, it is necessary to replace burned out lamps and reflectors frequently. The infra-red gas burners are capable of withstanding sudden shocks of cold water or paint drippings without cracking or breaking. This does not hold true in the case of the lamps.

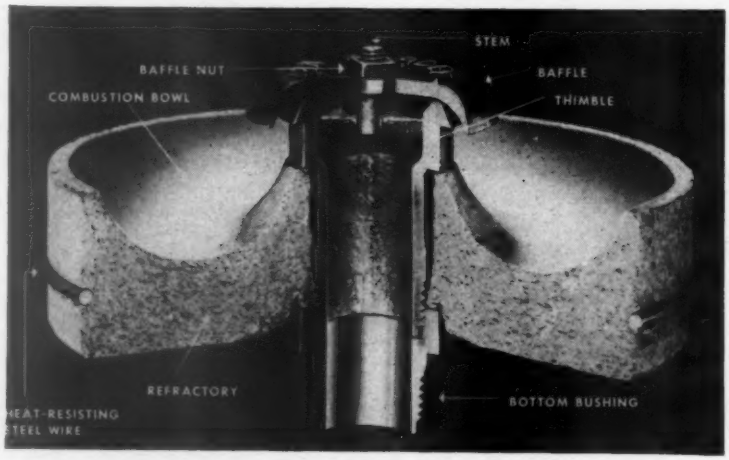
Advantages of Gas

Summing up the most important advantages of the refractory type burner, it can be said that: fuel consumption is unbelievably low; reformulation of paints for use under this drying system is not necessary; size and shape of work and thickness of material being processed has no bearing on speed and results; it is not necessary to focus burners on actual surface, which is a requirement in the use of electric lamps; pure oven atmosphere is always present; wide range of colors, finishes, shapes and sizes can be run through simultaneously with excellent results and temperatures from 150°F., to 400°F., can be obtained by merely resetting temperature controllers allowing a wide range of temperature and types of production without changing speed of conveyor.

Another typical example of infra-red gas burner performance is that of a Grand Rapids firm that has operated the oven to be discussed for approximately two years including Sundays and holidays without requiring maintenance.

This oven, originally constructed to meet specific requirements was indirect fired before conversion. It measured 180′ long and had a floor conveyor that traveled 24″ per minute. The paints used under these conditions were formulated for a cycle of 1½ hours at 300°F.

Conversion of this oven to employ infra-red gas burners cut 100′ from the length, making its overall length 80′ counting the 10′ vestibule air seal at each end. Two overhead monorail conveyors, traveling in opposite directions, were added, having a top speed of 10′ per minute and low speed of 8′ per minute. They actually operate at 9′ per minute under normal conditions. The floor conveyor, used for very heavy products, travels at 10′ to 14′ per minute. This oven operates four manifolds, each 25′ long—two manifolds on each side of the oven occupying 50′ in length.



Cut-away view shows detail of burner construction.

Flexibility

Greater flexibility, than found in this oven, is not possible. It will handle anything within the scope of the annual production of this plant from 150°F., to 450°F. Any temperature change, either up or down can be accomplished in seven minutes, permitting a complete paint change within that period without stopping the line of production. The company has also found that they can run their wood parts with the same ease and excellent results as their steel and aluminum parts.

It will be noticed that the conveyor speed will not permit the cure cycle to be longer than 6¼ minutes in the heat zone or 10 minutes overall, which is a far cry from 1½ hours as formerly required.

The original paint formula as perfected for the old method of production, is still used.

Products Handled

Production of this plant includes such items as bomb fins, aircraft products, plywood and oak seats, radiator core housings, automobile fenders, fender brackets, radiator shells and a range of hardware items which represents real flexibility. The total weight run thru the oven is 46,375 pounds per hour. They have never experienced any temperature drop, regardless of the size or kind of load.

RECENT COURT DECISIONS
Affecting Gas Utilities

New Gas Rate Suits

By
Leo T. Parker
Attorney at Law
Cincinnati, Ohio

THE outcome of practically all litigations involving gas rates is dependent upon legal interpretation of laws and constitutional clauses. In legal controversies of this nature the only object of the court is interpretation and construction of statutes or constitutional clauses in a manner designed to conform with the original intentions of the lawmakers. See 26 Am. & Eng. Enc. Law, 2nd Ed., p. 597; and United States v. Goldenberg, 168 U. S. 95.

When interpreting laws relating to gas rates the court will *not* supply words or clauses for any purpose, such as to render the language simple. Even when a court is convinced that the legislature, or other law making body, meant and intended something *not* expressed by the apparent phraseology, the court usually will not deem itself authorized to depart from the plain meaning of the language.

NATURAL GAS ACT

Modern higher courts hold that the primary purpose of the Natural Gas Act was to provide comprehensive regulation of wholesale distribution of natural gas moving interstate, and to authorize the Federal Power Commission to exercise such regulation to the best of its reasonable ability.

For illustration, in Colorado Interstate Gas Co. v. Federal Power Commission, Canadian River Gas Company v. Same, Colorado-Wyoming Gas Company v. Same, 142 Fed. (2d) 943, reported August, 1944, it was shown that the Federal Power Commission, after an exhaustive study of facts, rendered its decision regarding the rates being charged for gas sold in interstate commerce by three corporations, namely the Colorado Interstate Gas Company, the Canadian River Gas Company, and the Colorado-Wyoming Gas Company. In its decision the Commission determined that the rates and charges of Canadian Company were unjust and unreasonable to the extent of $561,000 annually; that the rates and charges of the Colorado Company were unjust and unreasonable in the amount of $2,065,000 annually; and that the rates of Colorado Wyoming Company were unjust and unreasonable in the sum of $119,000. The Commission ordered the companies to reduce their rates and charges by not less than such amounts, respectively, and directed that schedules of rates be filed effecting the reductions.

The various companies appealed to the higher court and asked that the order of the commission be set aside and reversed. The counsel for the companies used several arguments endeavoring to convince the court that the Commission's order was in error and invalid. One of these arguments was that the Commission erroneously undertook to exercise unauthorized rate-regulatory jurisdiction over the production and gathering properties, facilities and business of the company. In this respect the higher court said:

"The Commission did not attempt to affect in any manner the acquiring and maintaining of gas leaseholds, gas rights, or gas wells. Neither did it undertake to affect anywise the location, construction, extension, or physical connections of pipelines, or the operation of pipelines or other facilities constituting the gathering properties. The rate-regulatory jurisdiction of the Commission was exerted only in respect of rates and charges for natural gas transported in interstate commerce and sold in such commerce for resale for ultimate public consumption."

Another argument presented by one of the companies was abrogation of prices fixed by contract prior to effective date of the National Gas Act. In other words, the company contended that neither the Commission nor the Act could violate contracts for sale of gas in interstate commerce made *before* the law was passed. In this respect the higher court said:

"At all times, the transportation and sale of natural gas in interstate commerce for wholesale distribution to public service companies or municipalities for resale to domestic consumers was subject to regulation by Congress. And the exertion of the power of Congress in its regulation of interstate commerce is not fettered by pre-existing contracts or arrangements."

Therefore, contracts and arrangements of that kind necessarily are entered into with knowledge of the paramount authority of Congress to regulate commerce among the states. For other higher court decisions upholding this law, see Monongahela Company v. United States, 216 U. S. 177; Philadelphia Company v. Stimson, 223 U. S. 605; and Greenleaf Johnson v. Garrison, 237 U. S. 251.

With respect to the objection that the Commission was in error in arriving at the original cost of the properties, the higher court said that the Commisison was correct in taking into consideration profits earned by a subsidiary company in the sale of leaseholds.

Also, see Smith v. Illinois, 282 U. S. 133, where the Supreme Court of the United States said that where a natural gas company is engaged in an integrated business, part of which is subject to regulation and part of which lies beyond the reach of the regulatory jurisdiction of the Commission, some separation of the property, capital, and revenue is essential in order that regulation may be confined to its permitted field. The separation may be appropriately effected by estimating or appraising the value of the property used in the regulated business and that used in the unregulated business.

RATE OF RETURN

Modern higher courts consistently hold, with respect to interstate sales of gas, that the rate of return which

will constitute just compensation depends upon the circumstances. Obviously, a public utility is entitled to such rates as will permit it to earn a return on the value of its property devoted to the convenience of the public substantially equal to that generally being earned in that area by other business enterprises which are attended by corresponding characteristics, including uncertainties, risks, hazards, and other elements affecting the operations. The return should be sufficient in amount to assure confidence in the financial soundness of the utility, and to enable it under efficient management to maintain its credit.

However, in Bluefield v. Public Service Commission, 262 U. S. 679, the Supreme Court said that no formula can be laid down which will apply uniformly in all cases or to all kinds of utilities. That which is fair for one may be quite inadequate for another, depending upon differences in circumstances. And the ascertainment of a fair return in a given case is a matter incapable of exact mathematical demonstration. It is one of reasonable approximation having its basis in a proper consideration of all relevant facts. Also, see Willcox v. Consolidated Gas Company, 212 U. S. 19, where it was held that a return of six and one-half per cent on the rate base as fixed by the Commission was not so inadequate as to amount to confiscation. This same law was upheld in Federal Power Commission v. Natural Gas Pipeline Company; and Federal Power Commission v. Hope Natural Gas Company.

POWER OF STATE COMMISSION

Generally speaking, in view of Federal laws a state Public Service Commission has no power to issue valid laws and regulations respecting interstate sales of gas.

For illustration, in Illinois Gas Company v. Public Service Company, 314 U. S. 498, it was shown that a utility company is engaged in the distribution of gas to consumers in various cities and towns in Illinois. The Public Service Commission issued an order requiring gas producing company to supply the utility company with gas. Since the gas producing company transports gas by gas mains through several states, and in interstate commerce, the higher court held that the Illinois Public Service Commission could not legally compel it to supply gas to any corporation in Illinois. This decision was based upon clear and plain language used in the laws and regulations on interstate business established by Congress. The Supreme Court of the United States said:

"The proposed extention of appellent's (seller's) facilities is so intimately associated with the (interstate) commerce as to be within the Congressional power to regulate those matters which materially affect interstate commerce. . . ."

CONFLICT OF LAWS

Various higher courts have laid down the law that conflicting sentences in the same law are *not* to be assumed. However, when there is irreconcilable conflict between the clauses of a gas rate law the court has the privilege of deciding which of the conflicting provision is expressive of the legislative intent. As above explained the courts are bound by the explicit and unmistakable words of a statutory provision, unless there is an irreconcilable conflict between that provision and other provisions of the same or other statutes. In event such confliction exists, the provisions or section *last* enacted, or in order of arrangement, is deemed by the courts to be expressive of the legislative will. If one clause or provision is unconstitutional the other clauses are wholly effective. The latest higher court case involving this point of law is Northern States Power Company v. Board of Railroad Commissioners, 298 N. W. 423. This court said:

"Following the well established principle of construction that where a statute is reasonably subject to two constructions one of which is clearly constitutional and the other of which is of doubtful constitutionality the former will be adopted."

In this case the legal interpretation of a gas rate making law was before the court, and which provides:

"The value of the property of a public utility, as determined by the Commission, shall be such sum as represents as nearly as can be ascertained the money honestly and prudently invested in the property."

The court interpreted this clause, as follows:

"Fair value includes the appreciation in value of the utility's property where the allowance of the appreciation will *not* produce a rate unjust to the public."

Also, see Milwaukee Elec. R. & L. Company v. Milwaukee, P.U.R. 1918E, p. 1, 2, in which the Wisconsin Commission said:

"Fair value may be expressed as the amount which has been prudently and economically invested in the property."

Also, see Federal 315 U. S. 575, in which the United States Supreme Court held that it was not illegal nor objectional for the gas company to provide for annual amortization allowances which if accumulated at a 6½% compound interest rate, during the estimated life of the business, will be sufficient to restore the total investment, less salvage.

DUTY OF COMMISSION

The modern higher courts consistently hold that it is the legal duty of a Public Service Commission to fairly and properly consider all elements of present property valuation and normal expenses.

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as follows: Historical cost as of October 1, 1937, $1,097,087. Reproduction cost as of October 1, 1937, $1,348,353. In its findings the Commission placed its fair value at $1,180,000. The court did not agree with the Commission, and said:

"It is true that fair value and reproduction cost depreciated are not synonymous terms but . . . fair value must include the increase in value over original cost."

Also, the Commission refused to consider certain well established operating expenses. With respect to this refusal, the court said:

"It was the duty of the Commission to allow an amount which in its judgment was sufficient for the purpose. The Commission 'is not the financial manager of the corporation, and it is not empowered to substitute its judgment for that of the directors of the corporation'."

And the court explained that with respect to "going concern" value the Commission must include goodwill and franchise values, but that both of these elements must be excluded from the concept, in computing value for rate making purposes.

COMMISSION HAS AUTHORITY

Generally speaking, a Public Utility Commission has valid and legal authority to establish gas rates after expiration of a gas franchise, notwithstanding the fact that the contract held by the gas company includes the fixing of rates. Moreover, the court will not assume authority when, under certain circumstances, city officials petition the commission.

For instance, in City of Dearborn v. Michigan Consol. Gas Company, 297 N. W. 534, it was shown that a gas franchise provided a schedule of rates. Also, the franchise contained a clause to the effect that the charge to be made by the gas company for service, after the first five-year period, shall be fixed by agreement between the municipality and the gas company.

At the termination of a five years period the Commission established new gas rates, without regard to this clause. In upholding the ruling of the Commission, the court said:

"The Commission had assumed jurisdiction to fix fair and reasonable rates, on the petition of the city. Under these circumstances, the jurisdiction to fix such rates was in the Commisison, and not in the court."

Other important points of the law, as decided by modern higher courts, are that if a Public Service Commission establishes a rate which fails to yield a fair profit or return it is merely unreasonable and unjust, but not confiscatory. If, however, the established rate will not earn a fair profit or return but requires the utility to operate at a loss, it is confiscatory. If a legal gas rate is ordered by a Public Service Commission the company is obligated to supply gas at this rate until the court decides that the rate is either unreasonable or confiscatory.

In the leading case of Lone Star Gas Company v. State, 153 S. W. 681, the litigation involved an order issued by a Public Service Commission with respect to rates to gas consumers. The court said:

"The rate fixed by the commission is presumed to be valid, reasonable, and just until it is declared otherwise by a court of competent jurisdiction. . . ."

Another important point of law is that if a gas company contracts to supply a stipulated kind or grade of gas, the Commission is within its legal rights in disallowing expenses incurred by the company in supplying gas different from that specified in such contract.

For illustration, in Fuel Gas Company v. Public Utilities, 35 N. E. (2nd) 829, a contract was made between a municipality and gas company which fixed the rate for *natural* gas. The company began distribution of a hybrid product produced by a secret process of mixing manufactured gases with natural gases. The company officials contended that when arriving at a rate the expense of mixing the gas should be considered. The Commission refused to allow these expenses, when fixing the rate, and the higher court said:

"Natural gas was called for (in the contract) and natural gas should have been supplied—not mixed gas. The company in our estimation is not entitled to the benefit of any expense incurred in obtaining these manufactured gases. All expenses so incurred should be wholly eliminated in the determination of a rate base."

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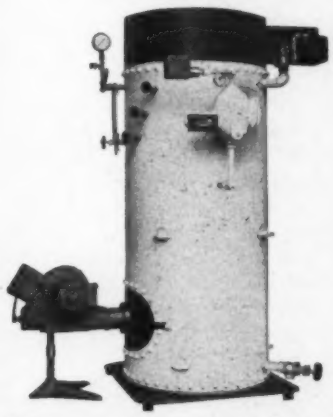

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National Safety Council Annual Meeting

THE National Safety Council held its annual meeting in Chicago, Oct. 3, 4 and 5th. The Public Utilities Section held meetings Oct. 3 and 5th, in the Sherman Hotel.

George J. Ruoff, Chairman, Accident Prevention Committee of A.G.A. presented a paper titled "Safety Problems and Progress in the Gas Industry." After reviewing the improvement in accident prevention during the past several years, he said:

"All of us probably will agree that we are and have been for some time, in possession of the '*know-how*' of this safety business as applying to our industry. We know that first of all, we must start off with top management's genuine, continuous concern and determination to eliminate the causes of accidents.

"We also know that we must carefully select our employees to eliminate the square pegs in round holes and round pegs in square holes—*both* misfits. We know that certain individuals have greater aptitudes for success at certain types of jobs. It is basic and fundamental that all individuals are just naturally *masters* at certain tasks; *average* at some; and downright *failures* at others. So, if a man is at the wrong job, don't blame him, because he is there through conditions beyond his control.

"We know that the next step is appropriate and continuous job training. Finally, we come to the most important of all; we know that we must furnish to the workers adequate and thoroughly trained supervision to follow through the job. This means *foremen* (The Arm of Management), provided with job knowledge, leadership, and training ability to see to it that management policy in all its ramifications is followed through to the letter by the workers under their supervision.

"Let's consider our future course of action. I believe we ought to realize more fully that everybody has his own problems, personal and company, and accordingly execute our jobs more carefully, taking into account to a greater degree, the *other* fellow's point of view. The foreman in the gas works or in the gas street gang doesn't want to experience accidents; or to see his men get hurt. Neither do the men themselves want accidents or injuries because an accident, after all, is "anything that goes wrong." It's something that actually embarrasses everybody involved.

"Let's not sit at our desks and issue reams of rules, instructions, reports, etc.; send them to the foreman or men, and expect them to "carry the ball," for us. Cut the items to one page only. Use sketches, utilize pictures. If you can "sugar coat" these with humor so much the better. Don't kid yourself by feeding them more than can be digested. Let us benefit by the marvelous help the war contractors of our country have obtained from the Government's Training Within Industry programs of:—"Job Instructor Training," "Job Relations Training" and "Job Methods Training." These programs are

Of Course! You Expect Big Things from "CLEVELAND" in the Post-War Trencher Picture

Throughout the nation, trenching machine users have come to associate the name "CLEVELAND" with trenching equipment pioneering and progress. Over the years, its record of achievement is indisputable. Post-War planning comes natural to us because "CLEVELAND" *has never stopped* planning.

It's smart to do *your* post-war planning by placing your order for "CLEVELANDS" now—the machines that are built to lick the tough jobs and the even tougher competition that is coming.

THE CLEVELAND TRENCHER COMPANY
20100 ST. CLAIR AVE. "Pioneer of the Small Trencher" CLEVELAND, OHIO
"CLEVELANDS" Save More...Because they Do More

fundamental—they recognize human engineering. They are not new! Most of us present have heard about the make-up of these "package," training courses ten to fifteen years ago.

"Let's not, get into anyone's hair," but sell the idea especially to supervisors that it's not so much what they say or do as it is the way they say or do it that counts. As one worker once confided to me: "I realize that the foreman has a job to do, but why treat the boys like dogs? It's goggles, *not* muzzles, men wear."

A decent regard for human personality not only should constrain one to simple courtesy; but effective supervision demands it! It has been said that "Harsh counsels are like hammers that are always repulsed by the anvil of resentment; whereas, civility costs nothing and buys everything."

"Let's approach this problem realistically. All of us for years have had to contend with square pegs in round holes and round pegs in square holes. After the war, this will be multiplied. This is our opportunity, yes, our job to help supervision to get "team action."

"Let's concentrate on giving the supervisors of this group the 'know how' in condensed, workable form."

D. E. Herringshaw, Consumers Power Co., Jackson, Mich., addressed the meeting and pointed out that: "Loss through leakage still constitutes a sizable portion of the nation's total production of natural and artificial gas , but the dollar value of the lost gas is small compared to the potential damage that leaking gas can cause."

"Our principal concern is to avoid the hazard to lives and property," Mr. Herringshaw said in explaining that the heavier demand for gas as fuel by war industries has brought about higher operating pressures with a resulting increase in danger to life and property if a leak occurs.

Testing for gas leaks today is a streamlined job of instruments compared to the old days when workmen traced a leak by lighting the escaping gas and digging to where the gas burned brightest at the faulty pipe. Mr. Herringshaw said in describing the use of an explosimeter. This modern instrument not only is used successfully in tracing gas leaks, but also provides a fairly accurate determination of the percentage of gas being sampled.

Use of activated charcoal filters, which distinguish between gases and vapors, enables the experimenter to determine whether gasoline vapors or city gas is being encountered.

"Our responsibility to protect the public against known dangers of an inherently dangerous commodity is a moral as well as a legal one," Mr. Herringshaw said. "To increase the effectiveness of leak detection we must employ modern equipment and rapid survey methods. The old methods are too slow. We need faster means of leakage detection and more frequent surveys."

Mr. Herringshaw urged close cooperation with associate utilities, as well as with police and fire departments. "In the course of their work and inspections they will discover many leaks and conditions which may develop leaks," he said, "and it is important that we accept their reports in an appreciative spirit."

"The present period of lessened new business activity affords an excellent time to take stock of what we are doing about an adequate and comprehensive leak survey. If it is to be done by repair crews in their spare time, it would be well to take steps to see what can be done, what tools are needed, and who can do it."

Book Reviews

Peace, Plenty and Petroleum, by Benjamin T. Brooks. Published by The Jacques Cattrell Press, Lancaster, Pa., 197 pages, size 5" x 7½". Price $2.50.

The book gives an adequate picture of the background and causes of the present oil situation. Though there is no need for alarm in regard to the supply of petroleum in the United States, there has been since 1935 a considerable and progressive decrease in the rate of finding new oil. It is inevitable, therefore, that the nation will become more and more dependent on imported oil, for, apart from war-time needs, sufficient oil for peace-time industrial economy can not be found in the United States, which consumes more oil products than the rest of the world combined. A series of international conferences regarding the world's oil supply, and a congressional investigation of the problem are planned.

The subject of the book, therefore, is of importance. It discusses the past, present and future of oil production, and emphasizes the necessity for a serious study of the problems that will confront the nation when Russia, which in 1939 produced over 212 million barrels of oil, is likely to replace the United States as the foremost producer of petroleum.

Seamless Tube Data Book, by Seamless Steel Tube Institute, Pittsburgh 19, Pa. 320 pages, Loose-Leaf Binder—Page size 8½" x 11" at $2.50 each.

This new book on tubing is divided into four principal sections, with guide index covering General Data—Mechanical Tubing—Pressure Tubing—and Reference Tables.

Under General Data—there is a brief summary on the history, manufacture, tests, special shapes and standard steels with chemical composition, mill practices, etc.

The section on Mechanical Tubing covers information on typical uses, suggestions of how to obtain best results through the use of tubing, determining proper size, with complete tolerance tables, properties for beams, and a digest of standard specifications.

The section on Pressure Tubing covers various pressure formulae, specifications and tolerance tables for boiler tubes, heat exchanger and condenser tubing, still tubes, alloy steel pipe, stainless steel analyses, with metallurgical data.

The Reference Table section is unusually extensive with many formulae, weight tables for rounds, squares, rectangles, surface areas both inside and outside, and other tables commonly found useful in tubing applications.

This is the most complete volume on this subject issued for many years. Supplementary sheets with new data will be supplied from time to time.

How to Select Foremen and Supervisors—by R. C. Oberdahn. Published by National Foremen's Institute, Inc., Deep River, Conn.—size 5½ x 8, 55 pages, bound in cloth. $2.00.

Mr. Oberdahn has brought together a compact presentation of the ideas and necessary procedures the executive in charge of personnel should know and apply to get good results. The Table of Contents of the Manual indicates the scope.

I.—What is a Foreman?
II.—Duties of a Foreman.
III.—Old Method of Selecting Foremen.
IV.—New Method of Selecting Foremen:
- (a) Preliminary Selection of
- (b) Establishing Tests.
- (c) Establishing Minimum Test Requirements.
- (d) Character Investigation.
- (e) Review of Record—Final Approval.

V.—Conclusion.

News of the Gas Industry

Indoor Climate Institute Open Forum

Indoor Climate Institute's Open Forum, held September 21st and 22nd in the Book-Cadillac Hotel, Detroit, Mich., was attended by more than 300 men and women representing manufacturers of heating, cooling and air conditioning equipment, editorial staffs of trade, general and shelter group publications, building interests, banking interests, and others who are directly concerned with the science and development of controlled indoor climate.

P. B. Zimmerman, President of I.C.I., and Vice President, Chrysler Corporation, Airtemp Division, officially opened the meeting. He outlined the birth of a new conception of human comfort and health as represented by the program of I.C.I. He showed how basic industries develop through progressive cycles of an introductory period, an acceptance era and finally the demand period.

Mr. Zimmerman emphasized the fact that the demand period must be preceded not only by product development which always increases utility and economy, but by an educational program that will enable the public to evaluate the benefits to be derived from the product. "In I.C.I. the heating, cooling ,and air conditioning industries will have a program of public education which will keep pace with the rapid development of products designed to provide controlled indoor climate," Mr. Zimmerman stated.

John K. Knighton, Sales Manager, Air Conditioning Division, Servel, Inc., and member of the I.C.I. Board of Directors, presented a challenging discussion on merchandising the quality line of heating equipment. He expressed a deep rooted conviction that the manufacturers of heating equipment had not fully recognized the opportunity to increase greatly the dollar volume of their sales by promoting their quality lines with superior features as against their price lines. He pointed out that as volume demand made possible volume production manufacturing economies would result. This, he explained, would bring the price structures of the quality lines down to a point where the spread between the two lines would be negligible as a sales deterrent. To accomplish this end, he declared, the public must be educated to a more intelligent sales approach on the subject of proper, adequate heating. He stated, "Heating should not be sold as a stripped B.T.U."

In a one-man "Information, Please" session, C. T. Burg, General Sales Manager, Iron Fireman Manufacturing Company, answered the questions that were being asked about I.C.I. He stated that the Institute was not attempting to displace or compete with other associations; will not tamper with or try to change the established channels of distribution. He explained that the I.C.I. program was not aimed exclusively at the small home market, but was concerned with controlled indoor climate in all working and living quarters.

Mr. Burg was emphatic in saying that I.C.I. would not set up equipment standards or have labels to identify products. The Institute would have no technical standards of its own, but would promote the highest standards adopted by the respective industry groups and recognized authorities. He stated that I.C.I. would make no attempt to regulate installation methods or to set up a laboratory for designing or testing equipment.

All I.C.I. officers were re-elected. They are: Paul B. Zimmerman, Chrysler Corporation, Airtemp Division, Dayton, President; T. A. Crawford, Timken Silent Automatic Division, Detroit, First Vice President; L. N. Hunter, The National Radiator Company, Johnstown, Pa., Second Vice President; R. E. Moore, Bell & Gossett Company, Morton Grove, Ill., Secretary; and E. N. McDonnell, McDonnell & Miller, Chicago, Treasurer.

OPEN FORUM, INDOOR CLIMATE INSTITUTE, SEPTEMBER 21st AND 22nd, BOOK-CADILLAC HOTEL, DETROIT

Left to right: T. A. Crawford, General Sales Manager, Timken Silent Automatic Division, 1st Vice President and Member of Board of Directors, Indoor Climate Institute; J. R. Scott, Assistant to the President, L. J. Mueller Furnace Company, Member of Board of Directors, Indoor Climate Institute; P. B. Zimmerman, Vice President and General Sales Manager, Airtemp Division, Chrysler Corporation, President and Member of Board of Directors, Indoor Climate Institute; C. D. Lyford, Minneapolis-Honeywell Regulator Company, Member of Board of Directors, Indoor Climate Institute; William B. Stout, Director of Research, Stout Research Division, Consolidated Vultee Aircraft Corporation.

A.G.A. Committee on National Advertising

H. Carl Wolf, chairman of the American Gas Association's Committee on National Advertising, announces certain changes in the personnel of the subcommittee on approval of domestic gas copy:

J. J. Quinn, sales manager of the Boston Consolidated Gas Co., and New England representative on the Committee on National Advertising, has been elected chairman of the committee, succeeding W. M. Jacobs, manager of general sales, Southern California Gas Co., Los Angeles, who was obliged to resign because of travel difficulties. Mr. Jacobs will continue to serve as a member of the committee.

Henry Obermeyer, assistant vice-president, Consolidated Edison Company of New York, rejoins the subcommittee on approval of domestic gas copy, as well as the national advertising committee of the Association's Industrial & Commercial Gas Section.

James I. Gorton Appointed Promotion Director of the "CP" Gas Range Program

The appointment of James I. Gorton as Promotion Director of the "CP" Gas Range Program, has been announced by Lloyd C. Ginn, Chairman of the "CP" Gas Range Manufacturers Division of the Association of Gas Appliance & Equipment Manufacturers.

Based on the increasing interest shown in the "CP" program by utilities and dealers, manufacturers of ranges bearing the "CP" seal announced an increase in their promotional budget for the first six months of 1945 at a meeting held in the Waldorf-Astoria Hotel in New York City on October 6, 1944.

James I. Gorton
Promotion Director
CP Range Program

The major part of the "CP" advertising appropriation will be used to support the $6,000,000 national and local newspaper advertising program now being carried on by the gas industry. Full page "CP" advertisements will be scheduled in trade publications covering the appliance dealers, furniture, hardware, and department sotres, and the architectural and building fields.

A dealer promotional package will be available to utilities for distribution to their dealers. This kit will contain a complete pre-selling program, window displays, newspaper advertising mats, guides to the selection of salesmen, guides to store planning, and preliminary sales training material.

95% of all gas utilities have indicated their intention of aggressively promoting gas ranges bearing the "CP" seal. In the last three months alone, more than 5,000 dealers have requested and received "CP" promotional material to use in pre-selling their customers.

The "CP" program was inaugurated in 1938 to create new higher standards for gas ranges ,and to provide the consumer with an easily recognizable buying guide.

The "CP" seal is the trademark of the Association of Gas Appliance & Equipment Mnaufacturers. Only gas ranges built by a member of the Association to specifications drawn up to the highest standards of leading home economists and engineers, may bear this seal. To make certain they meet these specifications, gas ranges bearing this seal are pre-tested by laboratories of the American Gas Association, or .by other attested laboratories.

Foxboro Announces Additions To Sales Personnel

The Foxboro Company, Foxboro, Mass., makers of industrial instruments for measurement and control, announces the addition of Mr. Frank Renner to the staff of Sales Engineers covering the Southern California territory. His headquarters are at Foxboro's office in Los Angeles, 2307 East 8th St., (21).

Mr. Renner has had nearly 20 years of industrial experience, and is especially familiar with the engineering problems involved in the production of oil and gas.

Mr. Robert Beers has joined the staff of Sales Engineers attached to the New York Office, and has already taken up his duties in the New York-New Jersey territory.

After graduating from Yale (Sheffield) in 1924, Mr. Beers spent several years in the production department of the Western Electric Co., followed by similar experience with the American Brass Co., and Whitehead Metal Products. For the past two years he has been with the WPB at Wahington.

Pittsburgh Equitable Consolidates Columbia and Atlanta Offices

Consolidation of the Columbia, South Carolina, and Atlanta, Georgia, offices of Pittsburgh Equitable Meter Company-Merco Nordstrom Valve Company was announced on September 1st, 1944, coincident to the retirement of F. G. Swaffield, district manager of the firm's Columbia office. Announcement of the change was made by A. J. Kerr, General Sales Manager of the company.

F. G. Swaffield

C. C. Moore

Mr. Swaffield's retirement ends his 40-year career with the sales force of Pittsburgh Equitable-Merco Nordstrom. Joining the company in 1904 as a salesman and later appointed district manager of the Columbia office, he has been largely responsible for the wide current use of the company's products—Pittsburgh-National water and oil meters, Emco gas meters and regulators, and Nordstrom valves—in the Columbia territory.

In assuming control of the Columbia office territory, C. C. Moore, manager of the Atlanta district office, now directs field sales in the entire southeast section of the United States. In this territory are the states of Florida, Georgia, Alabama, Mississippi, Tennessee, North and South Carolina, Virginia and most of Kentucky.

THE GOODMAN STOPPER

Now has the "Z" handle for easy manipulation. When locked in place it holds. Stopper cannot slip. Gas cannot pass. Adjusted in 30 seconds.

Ask for circulars on this and other distribution equipment.

Nearly a half century of service to the Gas Industry.

GOODMAN — USED SINCE 1897 — "Z" HANDLE & LOCKING SLEEVE — GAS MAIN STOPPER

The Reliable Shut-Off for Street Mains

Safety Gas Main Stopper Co.
523 Atlantic Avenue, Brooklyn, New York

THE STACEY MANUFACTURING CO.

Engineers Fabricators Constructors

• Gas Holders • Gas Plant Equipment • Steel Plate Construction •

GAS HOLDER INSPECTION SERVICE

Cincinnati — Ohio

93 STACEY SINCE 1851 Years

D. W. Harris Elected Pres. Arkansas Nat. Gas Co.

D. W. Harris, Shreveport, La., was elected president of the Arkansas Natural Gas Corporation on October 20th, at the annual meeting of directors in New York.

Mr. Harris has served as Vice President and General Manager of the company and its subsidiaries, Arkansas Fuel Oil Co., Arkansas Louisiana Gas Co., and Arkansas Pipeline Co., since 1928.

D. W. Harris

Under Mr. Harris's management the company has had a steady growth and is one of the leading oil and natural gas properties in the South. It pioneered in the discovery and development of the vast East Texas oil field and the Rodessa, Sligo, and Lincoln Parish, Louisiana fields.

In the new Carthage, Texas field, which the industry expects to be one of the largest natural gas fields in the world, the company has 22,000 acres of proven and potential holdings. Extensive acreage in the best oil and gas areas of Mississippi and Alabama are also held by the company.

Mr. Harris has held several official positions with Cities Service Company, and its subsidiaries in Denver, Bartlesville, Okla., and in New York. He is a director of the American Gas Association, a member of the Bankers Club of New York and has been active in all affairs of the oil and gas industry.

Domestic Thermostat Co. Moves General Offices

Ernest L. Learock, general manager of the Domestic Thermostat Company has announced the removal of the general offices and main plant of the company to larger and more centrally located quarters in downtown Los Angeles.

"This move is the first step in the expansion program planned for the Domestic Thermostat Company," stated Learock. "It reflects our confidence in the post-war market for our products and our realization of the constantly growing importance of Los Angeles as a marketing area.

"One of the immediate necessities for larger space is the result of the company's recently augmented engineering staff and the installation of additional technological facilities. Engineering research will play an extremely important part in our future plans."

The Domestic Thermostat Company was organized in 1935. In nine years, the company has expanded its business nationally. The line includes water heater thermostats, automatic safety pilots and controls.

Removal of the company's plant from 9818 Figueroa Street to the new location, 156 West Pico Blvd., will be completed by November 1st. Plant No. 2 on Metler Street will not be affected by the change.

W. R. Teller Appointed Research Director of The Bryant Heater Co.

Appointment of William R. Teller as director of research and development of The Bryant Heater Company of Cleveland was announced October 19th.

Mr. Teller, who has assumed his new duties, has been assistant director of the testing laboratories of the American Gas Association, also located in Cleveland, where he has served in various capacities since 1930.

Shortly after Pearl Harbor, Mr. Teller was placed in charge of the newly organized war products department of the A.G.A. testing laboratories. He was directly responsible for development of numerous controls and instruments for the Army and Navy and the Office of Scientific Research and Development.

William R. Teller

A greatly expanded research program is being undertaken by The Bryant Heater Company under Mr. Teller's direction. It will embrace improvements in gas heating equipment, range lighters, controls and appliances. The company is a member of Dresser Industries, Inc.

General Controls Announces New Kansas City Branch

General Controls Company of Glendale, California, announce the opening of a new Kansas City Branch at 421 Southwest Boulevard, Kansas City 8, Missouri, with Robert Courtney in charge as Branch Manager. The new quarters provide complete facilities for serving customers in Kansas and in adjacent areas in Missouri, Nebraska and Iowa. Bob Courtney is well qualified to extend this service by his long experience and thorough knowledge of automatic temperature, pressure and flow controls and their many uses in domestic, commercial and industrial fields.

COMPLETE GAS PLANTS
●
INDUSTRIAL FURNACES
●
THE GAS MACHINERY CO.
16100 Waterloo Road
Cleveland 10, Ohio

GAS PLANT EQUIPMENT
UGI REFINERY GAS REFORMING PROCESS
UGI NATURAL GAS REFORMING PROCESS
UGI HEAVY OIL PROCESS
GAS DISTRIBUTION
PIPE LINE CONSTRUCTION
THE U.G.I. CONTRACTING COMPANY
A DIVISION OF
UNITED ENGINEERS & CONSTRUCTORS INC
NEW YORK PHILADELPHIA CHICAGO
MAXIMUM RETURN TO CLIENT PER DOLLAR EXPENDED

E. Holley Poe Opens New York Office

E. Holley Poe former executive vice president of Petroleum Reserves Corporation, Washington, D. C., has opened offices at 70 Pine Street, New York City, with branches at 231 South La Salle Street, Chicago and 306 National Savings and Trust Bldg., Washington. H. C. Orton is in charge of the Chicago office and Samuel H. Crosby heads the office in Washington.

E. Holley Poe

Mr. Poe, his associates and staff, are engaged in consulting and advisory work concerning all phases of gas utility operation.

A native of Oklahoma, Mr. Poe grew up in the oil and gas industries and has been associated wtih various oil and gas companies throughout most of his business career.

In 1937 he was selected to head the Natural Gas Section of the American Gas Association. On June 1, 1942 he was called to Washington to become director of the Natural Gas and Natural Gasoline Division, Petroleum Administration for War, and remained in this position until October, 1943, when he took over the executive direction of Petroleum Reserves Corporation at the personal request of Secretary Ickes. His work with that corporation was successfully completed in March, 1944.

Hess to Represent Detroit-Michigan Stove Co. in N. Y.

A. S. Hess, formerly assistant to Harry Holbrook, Administrator of Orders L-182 and L-23 Plumbing and Heating Branch War Production Board, Washington, has joined the Detroit-Michigan Stove Co. and will represent that company as New York sales representative for Garland commercial cooking equipment. Prior to his position with WPB, Mr. Hess for several years represented commercial cooking equipment manufacturers in the East.

Banowsky Appointed Manager Retail Division of Payne Furnace and Supply Co.

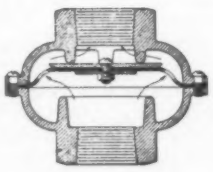
A. B. Banowsky, for thirteen years associated with the United Gas System, and for six years its Commercial and Industrial Sales Manager, has been appointed Manager, Retail Division, Payne Furnace & Supply Co., Inc., with headquarters at "Payneheat's" general offices in Beverly Hills, it was announced by E. L. Payne, president.

A nationally-known engineer, Mr. Banowsky has also had broad experience in the petroleum industry, in executive capacity with Continental Oil Co. and Shell Petroleum Co.

For the past eighteen months, he has been acting chairman of the AGA Subcommittee on Approval Requirements for Central Heating Appliances; and for three years, chairman of the Duct Furnace Sub-Committee. Recently, he has been active in the Gas Industry's work on standards for post-war heating installations. In Houston, he was president of the South Texas Chapter of the American Society of Heating and Ventilating Engineers and a member of the Houston Engineers' Club. He assumed his new duties with "Payneheat" in September.

A. B. Banowsky

Pressure Controls for Gas and Air



HORIZONTAL
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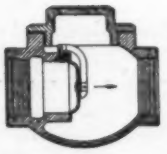
VERTICAL



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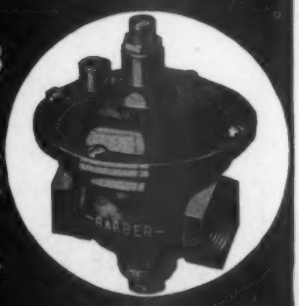
Gas Pressure REGULATORS

for Reliability!

Certified by A. G. A. Testing Laboratory. Write for Catalog and prices on Barber Conversion Burners, Appliance Burners, and Regulators.



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CLEVELAND OHIO

Sizes 1/4 up

FOR ECONOMICAL GAS PURIFICATION

Today's increased demands on the Gas Industry from both the production and home fronts has created many new problems in Gas Purification and sulphur corrosion.

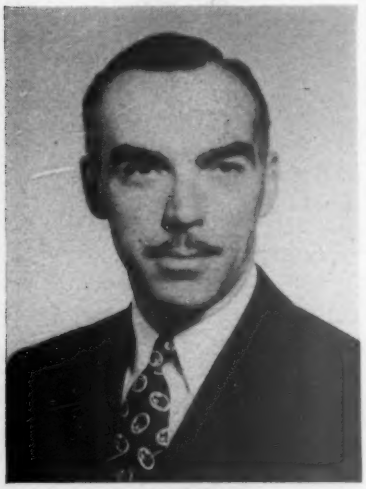
In hundreds of plants throughout the country, Connelly Iron Sponge has not only helped decrease costly sulphur corrosion, but has also materially improved gas purification and lowered the operating and maintenance costs.

If you have a problem in gas purification, it will pay you to consult Connelly. A thorough analysis of your problem and unbiased recommendations will be made without obligation.

CONNELLY IRON SPONGE & GOVERNOR CO
CHICAGO ILL - ELIZABETH N.J.

D. S. Whamond Joins A. O. Smith Corporation

Appointment of D. S. Whamond as eastern district sales manager of the A. O. Smith Corporation home appliance division has been announced by J. E. Woodall, home appliance manager at the firm's general offices in Milwaukee.



D. S. Whamond

Mr. Whamond assumed his new duties Oct. 2. His headquarters are in the New York district office, 155 East 44th Street, under supervision of Russell J. Irish, eastern executive administrator.

Mr. Whamond has had considerable experience in the home appliance industry. Until recently he was home appliance manager of the Bastian-Morley Co., Inc., La Porte, Ind., and previously was general manager of the Arrow Oil Burner Co., Inc., of Oak Park Ill.

Corrosion and Gas Holder Maintenance

Bulletin No. 1-44 issued by Stacey Bros. Gas Construction Co. devotes sixteen pages to corrosion control for gas holders of the wet seal type.

Amply illustrated with photos and diagrams, the causes of corrosion and preventive measures are amply set forth. Critical zones where corrosion frequently starts are discussed in considerable detail. Attention is also drawn to the holder inspection service maintained by the Company for prevention or control of interior and exterior corrosion. Copy of the bulletin is available by writing Stacey Bros., Cincinnati, Ohio.

Dresser Takes Over International-Stacey Corp.

Dresser Manufacturnig Co. stockholders approved by majority vote at a special meeting Oct. 16th, an increase in authorized capitalization from 350,000 to 600,000 shares.

At the same time the shareholders voted to change the organization's name from Dresser Manufacturing Co. to Dresser Industries, Inc., H. N. Mallon, president, announced. Dresser Industries, Inc., comprises a number of related companies producing equipment for the oil, gas and water fields.

"The enterprise can no longer go under the name of a single manufacturing company because it has, in fact, become a group of related industries," Mr. Mallon said.

The increased capitalization authorized by the shareholders today provided shares for the consummation of an agreement between Dresser Industries, Inc., and International-Stacey Corp. Effective Nov. 1, Dresser will acquire the properties of International-Stacey in consideration of the issuance of 103,000 shares of Dresser stock to International-Stacey shareholders.

Lt. Col. Thomas to Direct Reemployment of Consolidated Edison Service Men

Announcement was made in October by Consolidated Edison Company, New York, that Lieutenant-Colonel Atherton Thomas had been appointed assistant personnel director, with the assignment of fitting Consolidated Edison Company employes discharged from military service into jobs with special consideration of their experience, new skills and knowledge gained during the war. Colonel Thomas is expected to be released from the Army so he can take up his duties with the company this month.

Engineer of Forecasts and Statistics for the company, a graduate of the Massachusetts Institute of Technology, Colonel Thomas held a Reserve commission as Major, Coast Artillery, when he entered active service in July, 1942. He became Assistant Post Quartermaster at the Atlantic City Basic Training Center of the air forces. Later he was made coordinating officer of troop movements, Adjutant and Personnel Officer of the Basic Training Division. He was promoted to Lieutenant-Colonel and assigned as S-1, in charge of all personnel at the Atlantic City post. For more than a year he had the job of reassigning men who finished a tour of military service in Europe, came home for furlough, and were called back to duty.

J. E. Brown Assistant to General Sales Manager

Announcement of the promotion of J. E. Brown, veteran sales executive of Pittsburgh Equitable Meter Company - Merco Nordstrom Valve Company, to the position of Assistant to the General Sales Manager was made recently by A. J. Kerr, General Sales Manager of the combined organizations. Mr. Brown will maintain offices at the company's Pittsburgh headquarters.

"Ed," as he is known to his many friends and associates, joined the Pittsburgh Meter Company in 1906. Upon the consolidation of that firm with the Equitable Meter Company in 1926, he was made manager of the Chicago district office, but returned to Pittsburgh the following year as Director of Sales for the company. In that position he also directed the advertising of the company until a separate department was formed for that purpose. In 1942 the home office Sales Order Department was placed under Ed's jurisdiction, and these added duties aided greatly in preparing him for his new position. He will continue to manage the Sales Order Department in addition to assisting the Sales Manager.

CHEMICAL TABLES

A Handbook of selected subjects from the Handbook of Chemistry & Physics 1938 Edition.

Subjects covered include Mathematical Tables; Properties and Physical Constants of Organic and Inorganic Compounds; General Chemical Tables; Specific Gravity and Properties of Matter; Heat and Hygrometry; Electricity; Light; Quantities and Units. Also other miscellaneous subjects.

Sectionally arranged with a complete index. Size 5" x 7¼", 1390 pages, flexible leatherette cover.

$1.00 a copy postpaid — American Gas Journal, 53 Park Place, New York

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STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, of American Gas Journal, published monthly at East Stroudsburg, Pa., for October, 1944.

State of New York } ss.
County of New York }

Before me, a Notary Public in and for the State and county aforesaid, personally appeared S. G. Krake, who, having been duly sworn according to law, deposes and says that he is the Manager of the American Gas Journal and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 411, Postal Laws and Regulations.

1. That the names and addresses of the publisher, editor, managing editor and business managers are: Publisher, American Gas Journal, Inc., 53 Park Place, New York City; Associate Editor, Alfred I. Phillips, 53 Park Place, New York City; Business Manager, H. T. Matthew, 53 Park Place, New York City.

2. That the owner is: (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding one per cent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a firm, company, or other unincorporated concern, its name and address, as well as those of each individual member, must be given.) S. G. Krake, 53 Park Place, New York City.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state.) None.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom said trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is ——. (This information is required from daily publications only.)

S. G. KRAKE,
Manager.

Sworn to and subscribed before me this 29th day of September, 1944.

(Seal.) MARY E. KELLEHER.

(My commission expires March 30, 1946.)

BACK ISSUES—BUREAU OF MINES AND GEOLOGICAL SURVEY REPORTS AVAILABLE

Out of print Geological Survey and Bureau of Mines publications supplied. Send for lists indicating States in which you are interested. James C. Howgate Bookseller, 120 So. Church St., Schenectady 5, N. Y.

Horn With Columbia Malleable Castings Corp.

The Columbia Malleable Castings Corporation, Columbia, Pa., announces the appointment of Thomas R. Horan as Sales Manager of the Superseal Range and Heater Connector Department following the resignation from this position of Walter N. Borg.

Regional Sales Clinics Announced by American Gas Association

A series of seven regional sales clinics covering two important and timely subjects of vital interest to the gas industry—Selection and Training of Gas Appliance Salesmen and the Coordinated Kitchen Program—have just been announced by the Residential Section of the A.G.A.

Sponsored jointly by the Committee on Selection and Training of Sales Personnel headed by R. E. Williams of Binghamton, N. Y., and the Committee in Charge of the Coordinated Gas Kitchen Program, headed by J. J. Quinn of Boston, Massachusetts, these meetings have been conveniently arranged in various parts of the country. They will be held for one day only with approximately one-half day's time devoted to a full discussion of each subject.

Following is the schedule of dates and meetings arranged:

City	Hotel	Date
Boston, Mass.	Copley-Plaza	Nov. 30
New York City	Biltmore Hotel	Dec. 1
Pittsburgh, Pa.	William Penn	Dec. 4
Chicago, Ill.	Palmer House	Dec. 6
Kansas City, Mo.	Phillips Hotel	Dec. 8
Dallas, Texas	Baker Hotel	Dec. 11
Atlanta, Ga.	Atlanta Biltmore	Dec. 14

It is planned that morning sessions will be devoted to explanation with complete instruction on value of the salesmen's selection program as an aid to sales managers in upgrading appliance salesmen. It will be entirely directed to the selection of salesmen for domestic appliances including refrigerators, ranges, water heaters, etc.

Featured in the program for these meetings will be Dr. Robert McMurray, consultant for Servel, Inc., who will conduct the discussions on Selection and Training of Salesmen. The program on the Coordinated Kitchen will be in charge of H. Vinton Potter, director, who is a member of the staff for the American Gas Association.

Invitations to these meetings are being mailed to all gas companies by the A.G.A. together with an outline of the program and requesting advance registrations of those who will be in attendance. If by any chance you fail to receive one of the invitations, do not hesitate to write to the Secretary, Residential Section, American Gas Association, 420 Lexington Avenue, New York, N. Y., for complete details.

Every gas company executive interested in either the Salesmen's Selection Program or the Coordinated Kitchen Program will find his time well spent in attending the regional sales clinic in his territory. Register now for the nearest or most convenient meeting.

Meetings for the Pacific Coast will be arranged at a later date.

Special Committee to Administer A.G.A. Research and Promotional Plan

In a recent letter to gas company executives by E. R. Acker, Chairman Special Committee on Gas Industry Research and Promotional Plan, he states in part:

"The broad scope of the Plan and its extreme importance to the future of the industry demand that it be administered by a qualified group of executives keenly aware of the present position of the gas industry and fully responsive to the need for direct action to improve its position in the immediate future. As a result of the action of the Executive Board previously referred to, the Plan will be administered by a Special Committee of twelve industry executives listed below:

N. B. Bertolette	**F. S. Wade**
Hartford, Conn.	**Los Angeles, Calif.**
P. S. Young	**Paul B. McKee**
Newark, N. J.	**Portland, Ore.**
C. E. Bennett	**W. Bond Collins**
Pittsburgh, Pa.	**Miami Beach, Fla.**
Bruno Rahn	**C. H. Zachry**
Milwaukee, Wis.	**Dallas, Tex.**
H. K. Wrench	**F. T. Parks**
Minneapolis, Minn.	**Denver, Colo.**
J. V. Bowes	**E. R. Acker**
Tulsa, Okla.	**Chairman**
	Poughkeepsie, N. Y.

"A second Committee representing the best promotional talent in the industry will, with the assistance of the Chairmen of the interested Departments, Sections and Committees of the Association, have supervision over the operation of the Promotional Bureau provided under the Plan and of the promotional programs approved from time to time by the Special Committee of executives listed above.

"The research program financed by the Plan will be undertaken only upon recommendation of committees representing the most capable engineering talent available in the industry and upon approval of the Special Committee of executives.

"The President, and the Chairmen of the Natural Gas and Manufactured Gas Departments of the Association will serve as Ex-Officio members of the Committee."

The Byproduct Coke Oven Its History and Development

A brief history of the development of the byproduct coke oven, with a summary of the latest methods of coking as originated by Dr. Heinrich Koppers and developed to the present by the Koppers-Becker oven, has just been published by Koppers Company.

The book traces the coking process from 371 B.C. when Theophrastus, a pupil of Aristotle, wrote about it in his "History of Stones," through the days of the beehive oven to the present byproduct plant and its contributions to the modern production of chemicals from coal.

Handsomely bound with stiff cover, its 82 pages are generously illustrated by diagrams in color along with photos of installations and auxiliary equipment.

A complete list of plants in America is given including their rated coal-carbonizing capacity.

A limited edition only of this comprehensive treatise is published.

T. E. ROOKE

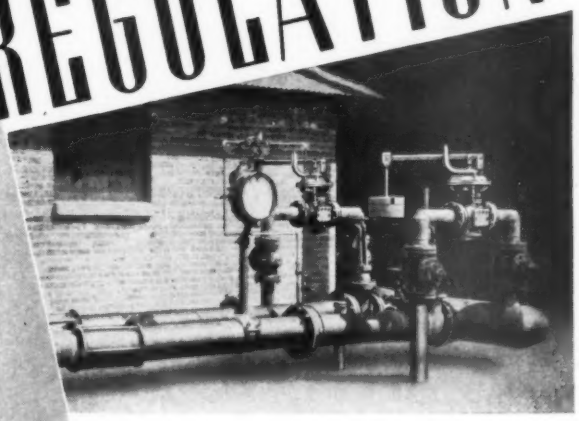
Thomas E. Rooke, 57, district manager of the Geo. D. Roper Corporation in the Iowa-Nebraska territory, passed away at the hospital in Longmont, Colorado on October 5, having been taken there after a heart attack suffered September 27. Funeral services were conducted October 10 at Omaha, Nebraska, where Mr. Rooke had made his home for a number of years.

T. E. Rooke

Tom Rooke's first association with the gas industry was with the Cedar Rapids Gas Company, Cedar Rapids, Iowa. He joined the Roper organization in 1918, covering at various times New York State, Michigan, Iowa, Nebraska, Colorado, Montana, Wyoming, Idaho and Utah.

The dean of Roper's field organization in point of service, he was well known throughout the entire gas industry. Active in Association committee work, he served as president of the Mid-West Gas Association in 1943. He will be missed not only by his Company but also by his host of friends in the industry.

GAS REGULATION



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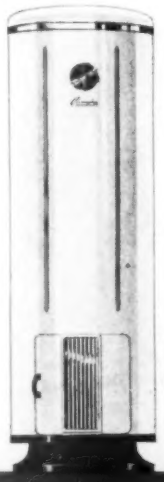

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